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ABSTRACT

This update of the "Learning by Design" Sourcebook expands the previous compilation of resource information and materials on environmental education projects, curriculum materials, books, people, and organizations. It, like the original sourcebook, is divided into four sections: (1) models--presenting basic features, descriptions, and historical development of and sample activities from exemplary environmental education programs; (2) resources--containing descriptions, representative illustrations, and sample activities from commercially available publications; (3) bibliography--containing annotated entries on various topics; and (4) networks--presenting lists of people/organizations involved in environmental education. Additions to the models, resources, and bibliography sections, and a completely new network section are provided, together with instructions on how to incorporate them into the existing sourcebook. Four additional models, 10 additional resources (and a new index for this section, reflecting the addition of these items), additional bibliography pages, and a completely new network section (replacing the current section) are included. Forms for making suggestions for future entries for each of the sections are also included. (JN)

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1982–1983 UPDATE

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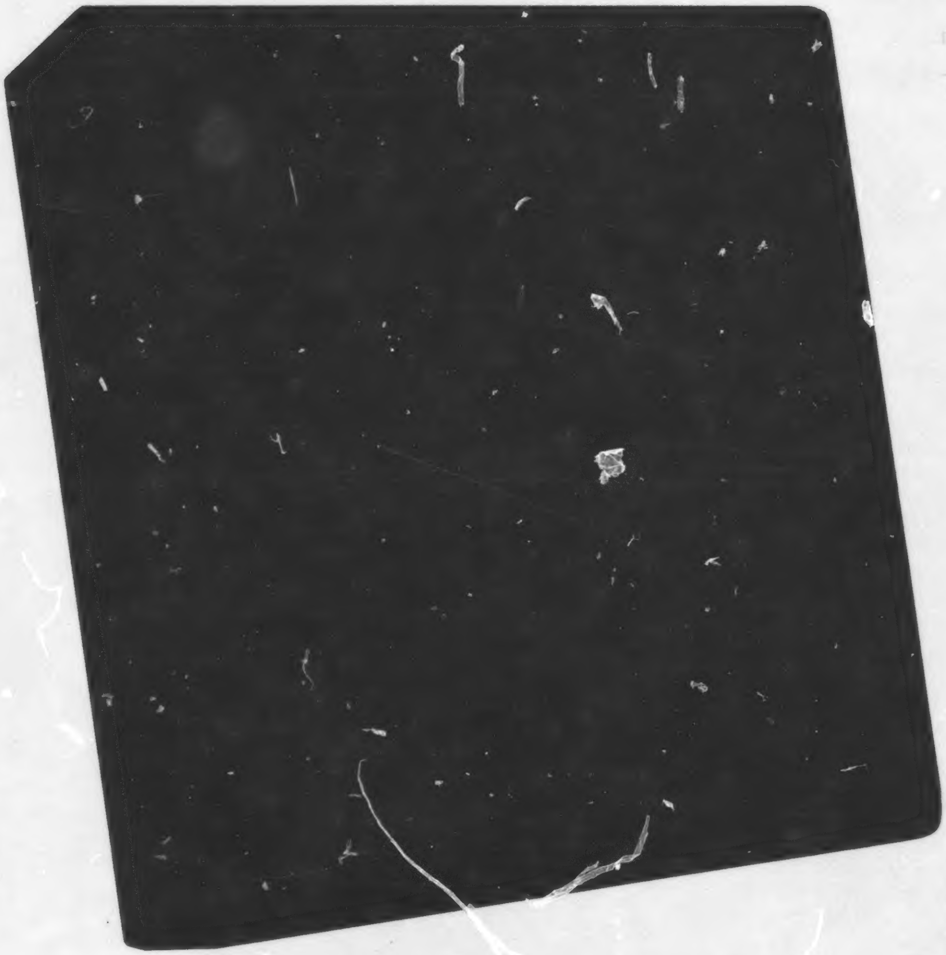

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The American Institute of Architects

the Sourcebook

Learning by Design

The Environmental Education Program of
The American Institute of Architects

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1982 – 1983 Update
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With the publication of the 1982 – 1983 Update we enter a new era in the Learning by Design program. The Update not only expands the information base of The Sourcebook, *it embodies the program itself, inasmuch as it represents an ongoing system of support and shared information that is germane to environmental education. As* The Sourcebook *began the process, this Update enlarges upon it. We anticipate updating* The Sourcebook *annually; more significantly, we expect an ever-increasing network of people and resources to develop.*

Here is the way the 1982 – 1983 Update works. There are additions to three sections, Models, Resources, and Bibliography, and a completely new Network section. This is what to do with them:

Models: Add the four new models at the end of the existing section.

Resources: Replace indexes at the front of the section with the two new ones. Insert the ten new resources in alphabetical order into the current section. (That order is represented in the new indexes.)

Bibliography: Add the new pages at the end of the existing section.

Network: Discard the original section and replace it with the completely new section.

It has been said that the only constant is change. The Sourcebook *has not proved an exception. During the past year, some of our original citations have been affected directly and indirectly by changing economic conditions. Some model programs have diminished activities or are threatened with extinction. Several resources are either temporarily or permanently out of print or their prices have changed. And people have changed jobs. These changes mean, of course, that information or materials you seek may not be available. Part of this problem has been solved by the new Network listing which contains the most up-to-date names, addresses, and phone numbers. Other revisions will have to await a second edition of* The Sourcebook. *We would appreciate hearing from you regarding any informational changes you have discovered while using these materials.*

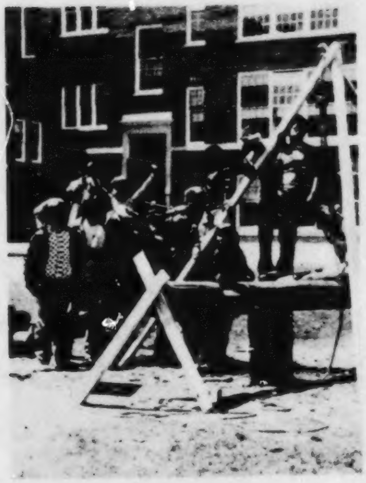
As The Sourcebook *celebrates its first anniversary, I am pleased to reflect on the excellent reception given its publication; reviews by both architects and educators have been very positive. I want to take this opportunity to thank all those who throughout the year generously offered their comments and constructive criticism. They have helped guide us in the development of the Update.*

My thanks also to the material review and selection panel of David Kennedy, Joanne Pratt, Alan Sexton, and Bruce Webb, as well as the research and writing of Kirk and Jack Hershey and the editing and graphic design of Alicia McGinley, Scott Miller and their staff. All these persons, along with the AIA Public Education Committee, have provided the special resources to produce this first Update for The Sourcebook.

Alan R. Sandler
Director
Public Education

October 1982

Arts in General Education



Allan Anderson

Learning Through the Arts

CLOSE-UP

Bill Smythe, an elementary math teacher in White Plains was the first classroom teacher involved with the Architect-in-Math component of Arts in General Education. *He relives his first experiences with the program in 1979: "My fifth grade students were three years behind their level in math; all my efforts were meeting with a brick wall. I talked with the architect-in-residence, and we decided to try a hands-on architectural project related to math. We settled on redesigning the classroom. I'll try anything once.*

"After two weeks of discussion, my students started to put their ideas on paper. The architect taught me and the class how to draw to scale, which is part of our more advanced math curriculum. The students drew the room, furniture and all, to scale and then proceeded to develop new designs and spatial arrangements.

"Then we got down to the nitty-gritty: we had to come up with one design, not twenty. After choosing five finalists, the class saw that each design had its good points. In three days, those kids, working during lunch, gym, free time, and math class, developed one plan that incorporated all the best aspects of the five designs. As far as they were concerned there was only one winning entry—the one they had designed as a team.

"The students spent the rest of the year planning and building their redesigned classroom, complete with a special study center, bookcases, and murals for each area of the curriculum. Enthusiasm and spirit never waned; I had kids in my classroom that I had never even seen before, working with their friends when extra hands were needed. By the end of the year, other changes were noticeable. I remember watching two former rivals hammering a board together. One of them had wanted to hammer but his fingers were too big to hold the nail safely, so his—by now—close friend held the nails for him while he carefully pounded away."

TITLE: **Arts in General Education**

INSTITUTION: White Plains School District

GRADE LEVEL: K through 12

RESOURCE TYPE: Year-long artist-in-residence projects

SUBJECT AREAS: Math, language arts, science, social studies, art

TOPICS COVERED: Architecture, landscape architecture, sculpture, graphic design, dance, drama, music

SETTING FOR USE: Classroom, school grounds, community

INFORMATION:
Dr. Ronald Topping, Coordinator
Joan Sanger, Assistant Coordinator
Arts in General Education
White Plains Public Schools
Board of Education
Education House
5 Homeside Lane
White Plains, NY 10605

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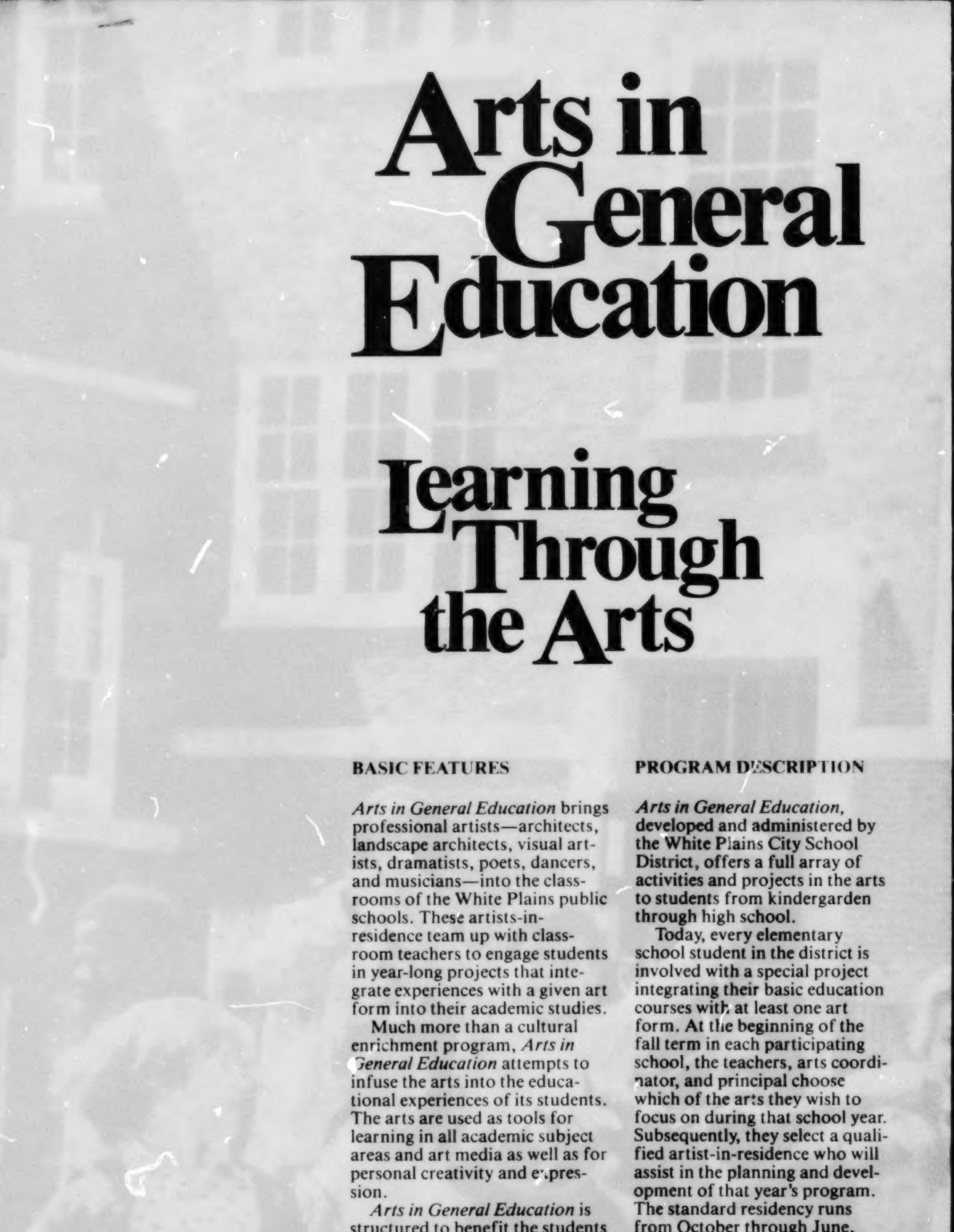


Arts in General Education

Learning Through the Arts

BASIC FEATURES

Arts in General Education brings professional artists—architects, landscape architects, visual artists, dramatists, poets, dancers, and musicians—into the classrooms of the White Plains public schools. These artists-in-residence team up with classroom teachers to engage students in year-long projects that integrate experiences with a given art form into their academic studies.

Much more than a cultural enrichment program, *Arts in General Education* attempts to infuse the arts into the educational experiences of its students. The arts are used as tools for learning in all academic subject areas and art media as well as for personal creativity and expression.

Arts in General Education is structured to benefit the students and their teachers, the selected artists, and the White Plains community at large. All of the students in the district are provided with opportunities to explore a variety of art forms

PROGRAM DESCRIPTION

Arts in General Education, developed and administered by the White Plains City School District, offers a full array of activities and projects in the arts to students from kindergarden through high school.

Today, every elementary school student in the district is involved with a special project integrating their basic education courses with at least one art form. At the beginning of the fall term in each participating school, the teachers, arts coordinator, and principal choose which of the arts they wish to focus on during that school year. Subsequently, they select a qualified artist-in-residence who will assist in the planning and development of that year's program. The standard residency runs from October through June, during which period approximately fifteen to twenty days of student contact are made in the classroom, on field trips, in studios, and on project sites. Most of the projects are designed for vided with opportunities to explore a variety of art forms and develop both an appreciation for the arts and a greater aesthetic understanding of their environment. The students learn to apply their basic educational skills through special art projects and to work as team members through sustained involvement in year-long group activities.

For teachers, *Arts in General Education* offers opportunities to expand their own knowledge and experience in the arts and to learn new teaching skills and methods for integrating the arts into their basic curricula. Teachers work directly with the artists-in-residence planning the projects and working as a team in the classroom and on the project site.

Parents, senior citizens, and civic leaders are encouraged to volunteer their efforts on various projects. A local advisory board, comprised of residents, city agencies, local colleges and museums, as well as representatives from the school district and funding agencies, offers substantive input to the ongoing program planning.

The artists-in-residence get practical experience teaching students and acquire invaluable insights into the needs and perspectives of a younger generation who will one day be their audience and clients.

dios, and on project sites. Most of the projects are designed for completion by the end of the school year.

Although the artists are instrumental to the specific projects at hand, one of the program's objectives is to enable the participating teachers to use these residency experiences as a springboard for future project development.

Classroom teachers work closely with the artists and expand on the projects between the artist's visits. In addition to this direct interaction, teachers may take additional in-service courses and workshops during the school year and the summer.

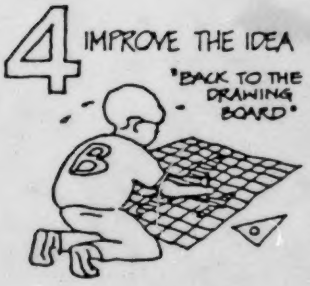
Arts in General Education also sponsors residencies in the district's middle school where fourteen teachers work with artists to offer every seventh-grader opportunities in the arts. The Architect-In-Math program brings students' mathematic skills up to grade through projects that make math more concrete by constant use of measurement, ratios, basic functions, scales, and proportion.

At the high school level, special courses are offered through the *Arts in General Education* program: a dancer-in-residence explains the cultural role of dance in social studies class and discusses anatomy in biology labs; French courses are enhanced by informal lectures and slide presentations on French architectural styles given by the architect-in-residence. Several arts teachers at White Plains High School have been awarded small stipends by *Arts in General Education* to team up with teachers in other subject areas. One art teacher, for example, is working with the English department on multiple images in literature and the visual arts.

For handicapped students there are special educational projects. There is also a mentorship program in which intermediate school students pair up with art students at a local college and develop projects in the performing arts.

2
DEVELOP THE IDEA
B

3
CHECK THE IDEA
"IT DIDN'T FLY"


4
IMPROVE THE IDEA
"BACK TO THE DRAWING BOARD"
B

PROGRAM DEVELOPMENT

The White Plains City School District has had artists-in-residence since 1971. But the impetus for the current *Arts in General Education* program came from an initial grant awarded in 1976 by the New York Foundation of the Arts as part of the National Endowment for the Arts' Artists-in-Schools Program. This first grant enabled two architects-in-residence to work with students in three elementary schools and a group of fifteen gifted students from the district. The residency resulted in a small park for senior citizens, a nature study center, redesign of a school's lobby, cafeteria, and several classrooms; and the development of new areas within existing ones—a media center in a school library, a quiet study area in a classroom.

The project director attributes much of the momentum of the program's subsequent development to these initial architectural projects because he believes architecture, of all the art forms, is most easily integrated into the basic subject areas. Teachers in science, math, and language arts could witness the benefits of these hands-on activities that required the use of traditional academic skills and knowledge.

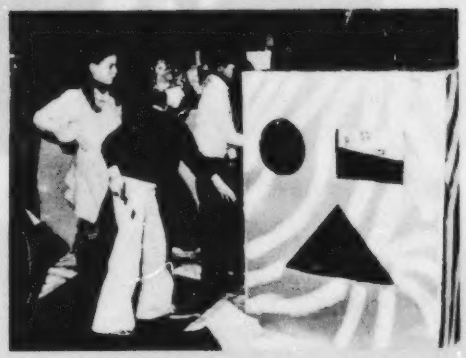
The success of those projects led to further grants and the development of an expanded comprehensive *Arts in General Education* program which has spread through the school district from elementary to high school classes and across academic disciplines to include multiple art forms. The program is now mandatory in the elementary schools.

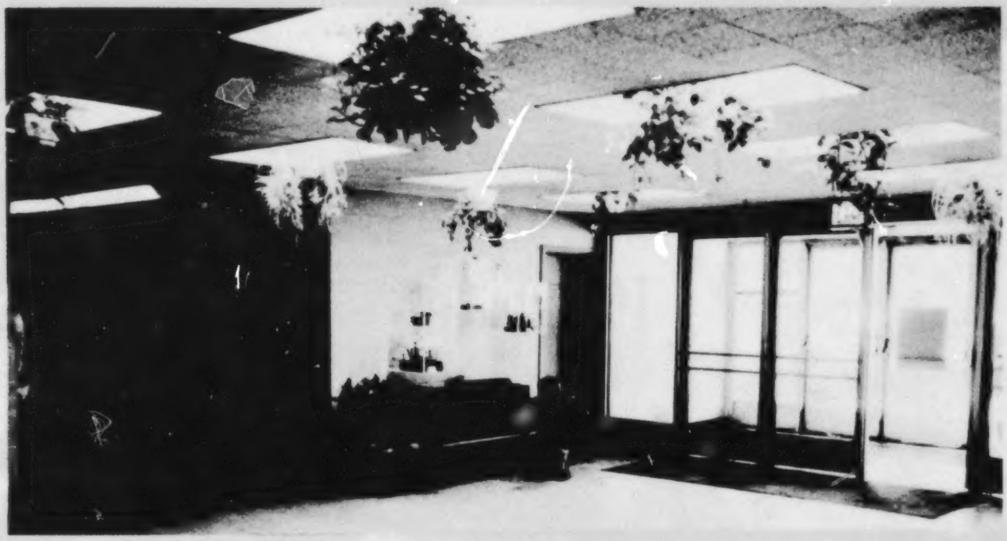
Funding has been secured over the years from a variety of local, state, and federal sources including the continued grants from the National Endowment for the Arts via the New York Foundation for the Arts, Title IV-C program funds from the federal government administered through New York State; the New York State's Poets-in-the-Schools, Inc.; and the Westchester (NY) Children's Association. Despite the recent cutbacks in federal funds and the educational block grants, the local board of education has increased its commitment to the program and funds have been raised locally from various community organizations, architectural firms, and the Beautification Foundation to keep the program moving.

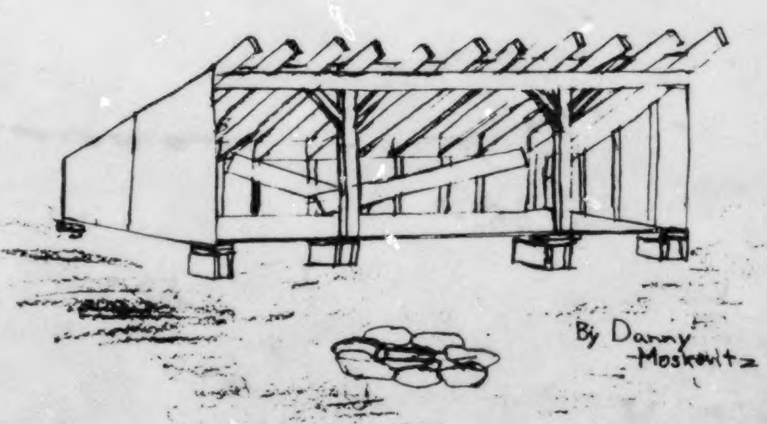
In addition to the broad support base, sound planning has been critical to the successful growth of the program. Specific goals were set in three-year plans for orderly development and the program carefully coordinated through both its central district office and the individual arts coordinators in each participating school.

Another significant factor has been the consistent quality of the artists-in-residence. A very thorough selection process has been developed to enable each school to select the artist most compatible with its particular interests and needs.

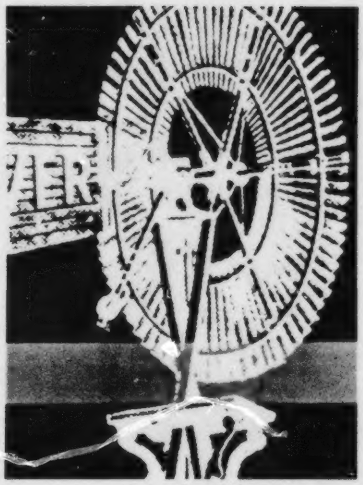
Another dimension of *Arts in General Education* is that every project is designed specifically for the interests and needs of the teachers, arts coordinators, students, and selected artists. There are no activity guides nor instructional manuals prescribing curricula. Instead, the projects grow out of the combined enthusiasm and unique contributions of the participants.






By Danny
Moskowitz

Design Michigan



Promoting Design Excellence

CLOSE-UP

Pat Delie, of the city of Utica, Michigan speaks for many who have benefitted from the Design Michigan *conferences and workshops. After attending the 1979 summer conference, Pat commented: "Since the 1979 summer conference much has occurred in Utica, which was already in the midst of redevelopment plans at that time. Historic Districting and other redevelopment approaches picked up at the conference, and articulated more in depth at a later mini-conference, had positive results with building owners, citizens, and representatives of the chamber of commerce and arts council.*

"One merchant donated a vacant greenspace between buildings for development as a mini-park. Since then, two landscaped areas have been begun next to two other stores, and a group of building owners are cleaning building exteriors using guidelines developed from a conference workshop.

"A Historic District Study Commission was formed and a public hearing on a proposed historic district was held. Establishing such a district offers some important tax incentives and benefits to both merchants and residents, as the proposed district encompasses a collection of historic homes just north of the downtown. The southern limit of the proposed district includes our existing Memorial Park and extends west to our old waterworks building. The Arts Council obtained an architect and preliminary plans for the use of this unique structure as a cultural arts center have been drawn up.

"All in all, we have made great progress in renovating our downtown area. The wholehearted support of our business leaders who now serve on a businessmen's advisory council allows the collaborative effort and steady progress which keeps us moving forward."

TITLE: **Design Michigan**

INSTITUTION: Cranbrook Academy of Art

GRADE LEVEL: Adult, with a series of educational materials for middle schools

RESOURCE TYPE: Outreach program and resource center with numerous publications and services available

SUBJECT AREAS: Design and its application to environmental, economic, social, and cultural dimensions of communities

TOPICS COVERED: Architecture and landscape architecture, environmental design and planning, interior design, industrial and commercial design, communication graphics

SETTING FOR USE/AUDIENCE: Civic groups, local government agencies, schools, business associations

INFORMATION:
Jack Williamson
Program Director
Design Michigan
Cranbrook Academy of Art
500 Lone Pine Road
PO Box 801
Bloomfield Hills, MI 48013

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Design Michigan

Promoting Design Excellence

BASIC FEATURES

Design Michigan is a nonprofit state outreach program of the Cranbrook Academy of Art. Since 1977, it has provided design awareness and education opportunities through conferences, workshops, design consultation, exhibits, and educational materials, and documentation to private, business, and community audiences.

Design Michigan's success has been built on an effective statewide alliance among the academic community, professional societies, and the state's art council, which has supported the program's progress in advancing design excellence; preserving and improving civic environments; addressing design needs of minorities, handicapped persons, and the elderly; promoting design alternatives for culturally and economically disadvantaged localities; and building organizational capabilities through community design activities.

Design Michigan offers a dis-

PROGRAM DESCRIPTION

Design Michigan offers numerous educational programs, services, and materials to further the awareness and use of effective design.

Design Michigan achieves statewide educational outreach through two major program functions: services to the field and a design clearinghouse. The services component encompasses workshops, exhibits, conferences, slide shows, and lectures provided on request to broad and special interest groups. Workshops have focused on the ways in which effective design can contribute to the visual, economic, and cultural improvement of cities and towns; approaches to designing environments for special needs, such as disabled persons; and industrial design in product development for manufacturing associations and business organizations.

The portable Mini-Exhibit tours Michigan communities demonstrating the effective use

Program evaluation is built into each *Design Michigan* activity through solicited feedback forms, on-site questionnaires, immediate audience response, and follow-up correspondence.

Design Michigan is not a designer referral service nor does it promote individual designers or design studios, although it does provide listings of professional persons and design assistance organizations. Its role may best be viewed as a catalyst, encouraging quality design through awareness and education on the premise that the informed, active client is crucial for good design.

munity design activities.

Design Michigan offers a distinctly eclectic orientation toward design and its application. The design field is presented as a rich collection of applied arts disciplines including architecture and landscape architecture, environmental design and planning, interior design, industrial and commercial design, and communications graphics.

The application and use of good design is incorporated by *Design Michigan* into community problem-solving activities that encompass environmental, social, cultural, and economic dimensions of the quality of life. Placed in this broad context, the impact and influence of design are readily appreciated.

demonstrating the effective use of design and fostering an awareness and appreciation of quality design.

Design awareness lectures and slide shows on the importance of design and the nature of the design process are provided to school groups and professional and government associations. Design consultations on site-specific design concerns are also available.

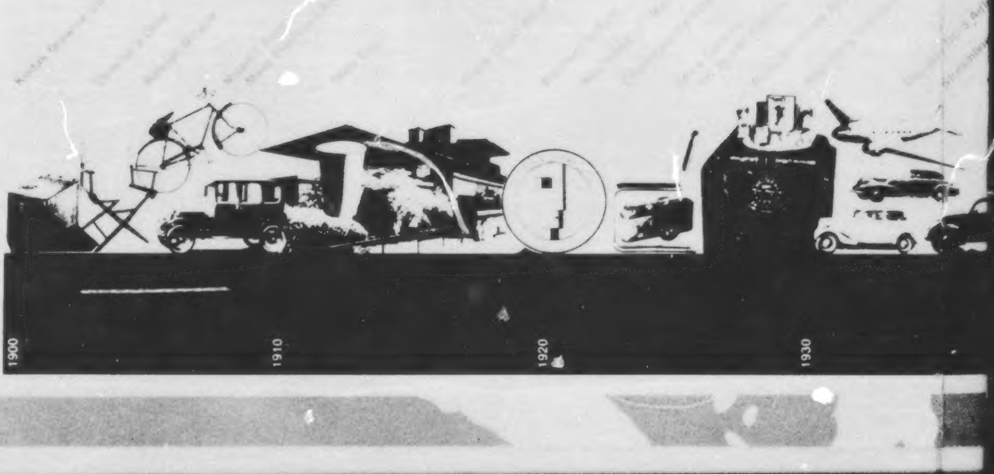
Clearinghouse activities include the dissemination of publications and program materials, a design hotline, and a speakers' referral service. The publications—themselves excellent models of design in their clarity, utility, and diversity of format—include conference proceedings, the *Design Michigan Quarterly* newsletter, design handbooks, numerous client guides, an upcoming information directory on revitalization resources, and the award-winning ***Problem Solving in the Man Made Environment*** series of educational materials for middle schools.

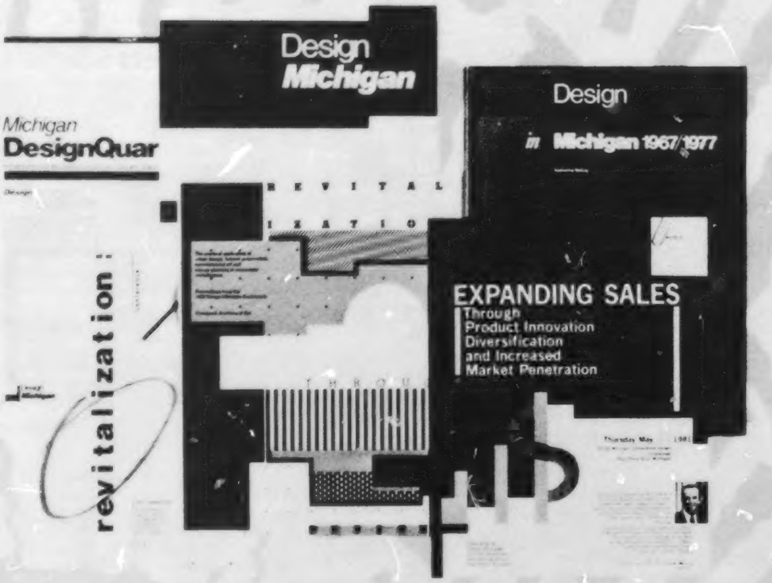
Design
Michi

A11

Major events in design
To determine the importance of someone or something in history it is necessary to view them in relation to their place in time, in relation to what proceeds them, and the results that follow each event. Television could not have been conceived had Marconi not first invented the concept of wireless communication. The contemporary steel and glass buildings of today were made possible by experiments begun in the 1920's.

The purpose of the time line is to show a sequence of events in history and to gain an understanding of the influence of events upon each other. What important events that have affected the man-made environment would you add to this time line?




Design Michigan
Michigan DesignQuar
Design in Michigan 1967/1977
REVITAL
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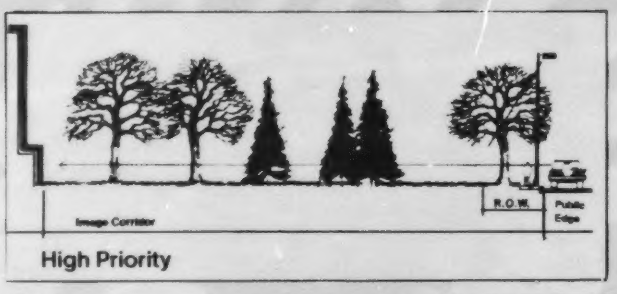
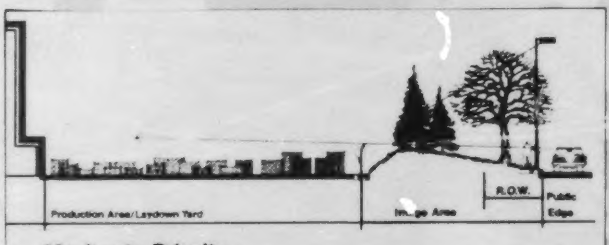
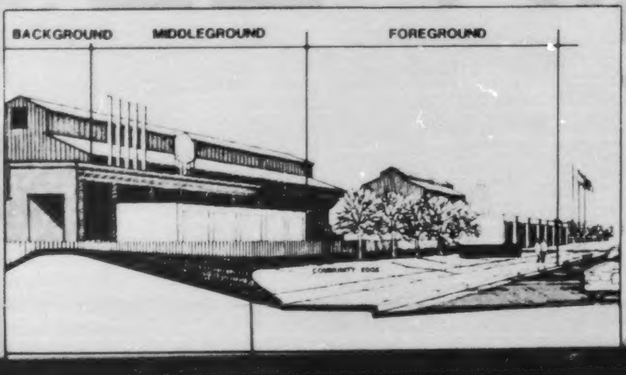
revitalization:
EXPANDING SALES
Through
Product Innovation
Diversification
and Increased
Market Penetration
Thursday May


R.O.W.
Public Edge
Image Corridor

High Priority


R.O.W.
Public Edge
Production Area/Laydown Yard
Image Area

Moderate Priority


BACKGROUND
MIDDLEGROUND
FOREGROUND
COMMUNITY EDGE

PROGRAM DEVELOPMENT

Design Michigan originated in 1974 as a collaboration between Cranbrook Academy of Art and the Michigan Council for the Arts with funding from the National Endowment for the Arts. In 1977, Governor Milliken declared "Design Michigan Year" during which the first statewide design assembly for representatives of government and business was convened, giving rise to several smaller conferences for administrators in state government. The year culminated in a major exhibition of historic and contemporary design in Michigan.

In 1978, *Design Michigan* was reorganized as a public information and service program sponsored by the Cranbrook Academy of Art. Funding was supplied by the Michigan Council for the Arts and the National Endowment for the Arts. The program director works closely with the Academy staff and is guided by an Advisory Council of design and arts professionals from across the state who represent the diversity of design audiences and disciplines. Graduate design students, supervised by the co-chairmen of the Academy's design department, produce the *Design Michigan* materials and exhibits. Additional design professionals and technical personnel from local and state design societies, technical service institutes, and government agencies assist in the workshop programming, design consultations, lectures, slide presentations, and exhibits.

Since its inception, *Design Michigan* has sought to address the full spectrum of design applications and issues, from environmental planning to community rehabilitation, interior design to landscape architecture, industrial design to public signage. *Design Michigan* has responded to requests for design education throughout the state, staging conferences, workshops, design demonstrations, and exhibits. Program mailings now reach over 7,500 public and private organizations, and interested individuals.

Design Michigan has succeeded in effecting tangible, often dramatic, design improvements. As a consequence of its various outreach activities both

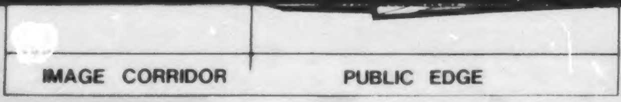
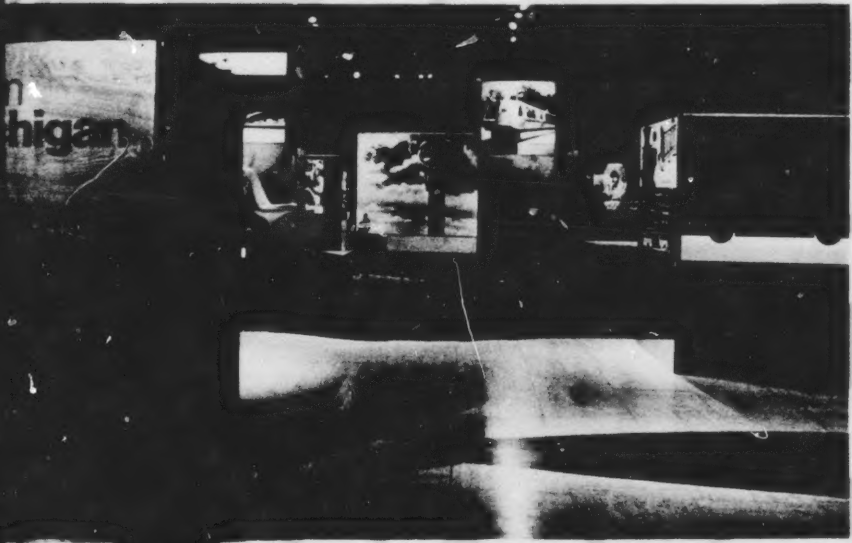
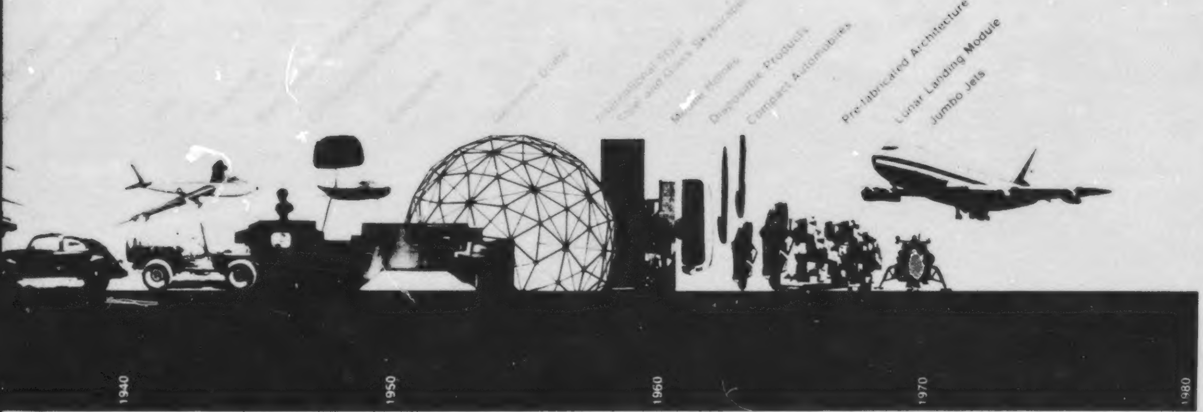


IMAGE CORRIDOR
PUBLIC EDGE

ments. As a consequence of its various outreach activities both physical and organizational changes have occurred including, for example, restoration of store-fronts, revision of town master plans, institution of city identity programs through use of logo designs, and designation of historic districts. The program itself has achieved national recognition, receiving several national design awards and special recognition in 1980 from the National Endowment for the Arts' Design Arts Program.




Geodesic Dome
International Style
Steel and Glass Skyscrapers
Mobile Homes
Disposable Products
Compact Automobiles
Prefabricated Architecture
Lunar Landing Module
Jumbo Jets
1940
1950
1960
1970
1980

Foxfire

Exploring Cultural Heritage

CLOSE-UP

Kim Hamilton, a senior at Rabun County High School, has been involved with Foxfire *since the beginning of ninth grade.*

"I've taken the Foxfire *class that produces the magazine almost every term. I've written lots of articles, many of them on interviews with my grandfather about making shoes and fixing chairs. I did a story on my old baby high chair that my great-grandfather had given me.*

"I've been working the longest on a cookbook of old recipes for cooking on a woodstove. We've been working on it for two years now, collecting recipes and menus. The book also explains how to cook on a wood stove. It's called Foxfire Wood Stove Cookery *and when we get it all finished it's going to be published. There was a time when we never wanted to hear the word "cookbook" again, but when I start something I don't just like to leave it there, so I'm still working. . . .*

"I don't believe I'd be going to college if it weren't for Foxfire. *They treat you like an adult and you have responsibilities. You meet up with problems that you wouldn't otherwise deal with in the classroom, and you just learn to do things the best way you can and it all turns out okay. I understand people better now. Also, I see things a lot differently. Like antiques. My grandmother's got several of them and before I got to* Foxfire *I just thought of them as pieces of old furniture. Now I know better.*

"It sort of scares me about going to college, but I think I'll do all right. I took one of Wigg's [Eliot Wigginton] English college courses—English is my hardest subject—and he graded us just like at a university, and I came out with an 83 grade average."

TITLE: **Foxfire**

INSTITUTION: Foxfire Fund, Inc., Rabun County High School

GRADE LEVEL: 7 through 12

RESOURCE TYPE: Educational program with multimedia publications and production activities

SUBJECT AREAS: Environmental education, all traditional subject areas

TOPICS COVERED: Cultural journalism, social, environmental, and economic environments, the arts

SETTING FOR USE: High school classroom, studios, and the community at large

INFORMATION:
Eliot Wigginton
Program Director
Foxfire
Rabun Gap, GA 30568

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Foxfire

Exploring Cultural Heritage

BASIC FEATURES

"Foxfire," once only the name of a lichen glowing in the dark, has become synonymous with an educational process that actively engages students in discovering their heritage as well as developing awareness about their future.

Embodied in a full range of production opportunities, from publishing the now sixteen-year-old *Foxfire* magazine to producing local cable television programming, recordings of traditional and contemporary Appalachian music, photography exhibits and calendars, and authentic craft reproductions, the *Foxfire* process enables students to apply and master language arts skills, math and science, history and geography, art and music. *Foxfire* puts students in touch with themselves, their cultural heritage, and the future of their environment and community.

While gaining wide recognition through its publications and contributions to cultural journalism, the *Foxfire* program deserves particular notice as an example of environmental education that combines the exploration of a place and its people with an experiential, learning-by-doing approach to education.

PROGRAM DESCRIPTION

In addition to the quarterly magazine, whose articles are compiled regularly into a bound book (the most recent of which is *Foxire 7*), the *Foxfire* program encompasses an ever-expanding range of subject areas and projects that touch on every facet of Rabun County's culture and environment. Sixteen elective courses are now offered at the local high school by *Foxfire* staff in concert with the school's departments of language arts, biology, history, music, and art. Students participate in numerous after-school and summer opportunities offered by *Foxfire* both off and on its 110-acre center. There, students and local carpenters have rebuilt twenty-three historic log structures to house artifacts, archives, woodworking shops, darkrooms, editorial and layout areas, offices, and guest and staff housing.

The Press has expanded to publish the results of intensive student projects that research Appalachian life, past and present. Recently *Foxfire's Book of Wood Stove Cookery* was published; other books—one about Aunt Arie (a favorite contact of *Foxfire*) and another on log cabin construction—are on

by-doing approach to education.

Foxfire demonstrates the validity of using the community as a living classroom and empowering students to communicate what they have learned through a full range of media.

Foxfire represents the unlimited potential of partnership in learning, between teachers and students, children and parents, school and community. It is no accident that what began as a modest attempt to discover a community's roots has blossomed into a multifaceted concern for and commitment to the cultural, environmental, and economic health of a region.

log cabin construction—are on the way. Additional publications on water quality issues in the county, rural development concerns, and special oral histories are envisioned. A year-long Journalism Internship Program for college students and postgraduates supports individual research and editing the manuscripts of local authors.

The studio of the Community Video and Television Program was designed and built by the students in the town of Clayton. This project brings student-produced daily programming to Rabun County via Rabun Cablevision. Programs offer local concerts, *Foxfire* interviews, town meetings, ballgames, and other local interest events. Other projects provide the local radio station with student-developed dramas.

The Recording Program emphasizes the musical heritage of the area, building on three of the elective high school courses (in musical traditions, instrument building, and basic performance). A six-piece string band performs bluegrass music throughout the state. Two record series produced by students are now available: one on traditional mountain music and the other on contemporary songwriters.

The Environmental Studies and Outdoor Education Program is another aspect of *Foxfire's* comprehensive approach to the human and physical environment. In coordination with the high school's biology department, *Foxfire* staff offers courses in native plant and animal species and independent study projects on local environmental issues. Students have helped design nature trails for other nearby schools and have delved into alternative energy and ecology projects. Students are currently building a 22' x 30' log structure on the school property to house the outdoor education program and classes.

The Photography Program continues to be an essential dimension of the documentary and creative side of *Foxfire*. Expanded facilities have led to improvements in the magazine illustrations, the annual production of *Foxfire* calendars, photographic competitions, and exhibits in well-travelled local display areas.

As *Foxfire* has become an integral part of its community, efforts to contribute more actively to the healthy development of the county are taking shape. A Community Development Corporation will initiate and manage various private enterprises which, in turn, will create employment opportunities for local residents.

Behind all this activity are the students who are responsible for the day-to-day operation of *Foxfire*. They not only enjoy the selection of courses and the special projects and productions, but they are also involved in all the business aspects of these enterprises. Students assist in the bookkeeping, keep up with circulation, write ad copy, prepare budgets, answer letters, pay bills, and meet a payroll—all with the help of a small, committed staff, many of whom first learned of *Foxfire* when they themselves were students at Rabun County High School.

PROGRAM DEVELOPMENT

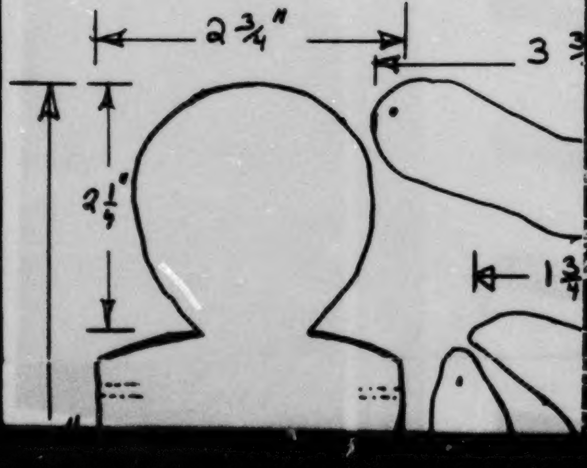
In 1966, 140 ninth and tenth grade students of the Rabun Gap-Nacoochee School were challenged by their English teacher, Eliot Wigginton, to start a magazine about their northeastern Georgia community. Not only did the students talk with their grandparents and track down old-timers with almost-forgotten tales of the past, but they also transcribed and edited their taped interviews, photographed and made prints, composed artwork and designed the layout, raised the production money, handled the bookkeeping, and managed the sales. This was the beginning of *Foxfire;* it didn't stop there.

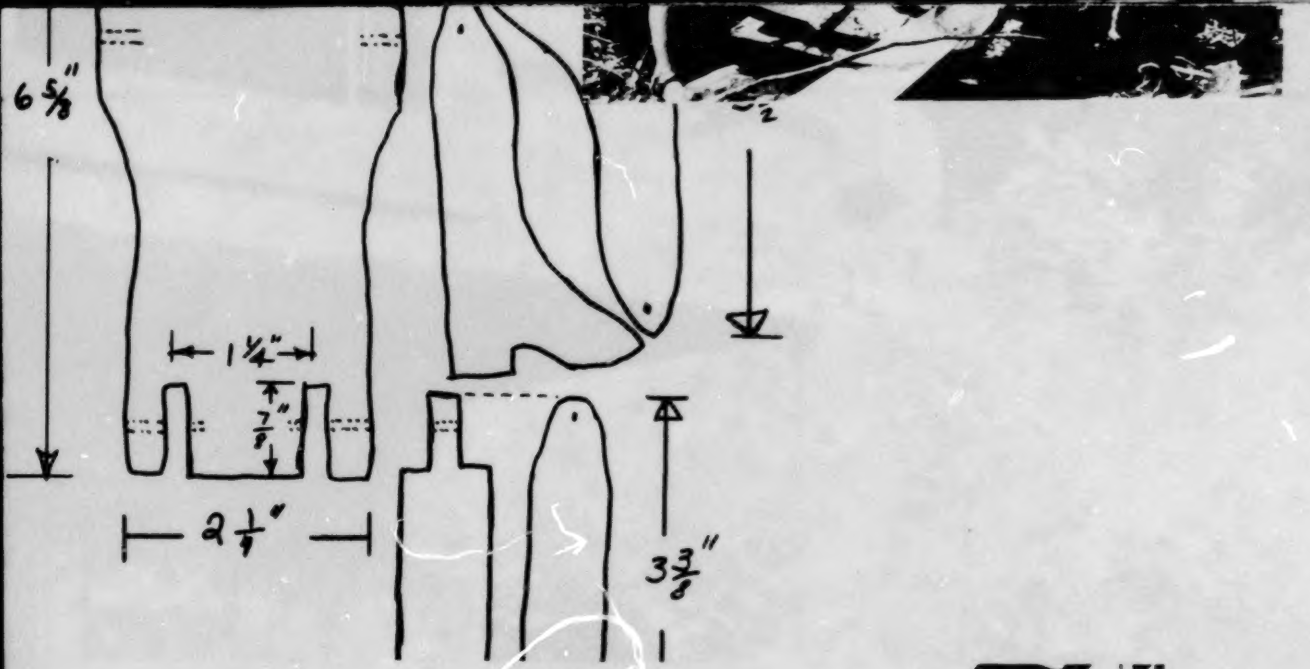
The magazine continued to come out quarterly. Six years later, a selection of articles from the magazine was published as *The Foxfire Book* and soon became the most successful volume in the publisher's career.

The tangible success of these publications is not, of course, the most significant dimension of this program. As the program grew, it was incorporated as a nonprofit, tax-exempt organization within the local high school. Now known as Foxfire Fund, Inc., it manages the proceeds from publications, supports the teaching and administrative staff, and solicits donations and grant support. Recently, the National Endowment for the Humanities awarded a challenge grant to assist in building an endowment for the program. This was the first grant of its kind to be awarded to a program located within a public high school.

In addition to the continuous expansion of local projects and community activities, *Foxfire* has encouraged its replication in schools around the country and the world. By one account, more than three hundred schools have initiated projects in cultural journalism on the *Foxfire* model. Over the last ten years, *Foxfire* staff and students have participated in hundreds of workshops in high schools and colleges around the country, explaining their program and describing their experiences. A newsletter, *Hands On,* provides a communications link for teachers to share ideas and experiences that have been inspired by *Foxfire*. And a National Workshop in Cultural Journalism brought together teachers and students engaged in similar projects, many of which have led to commercial publications.

Sixteen years is a long time for any successful high school project not only to survive but to grow and inspire others. It is to its credit that the unavoidable weight of success and necessary institutionalization has not affected *Foxfire's* stride. The integrity of the program, which from its beginning rested on the active participation and direction of the students themselves, has insured that special freshness, enthusiasm, and love of learning that symbolizes *Foxfire*. Like its namesake, the program continues to glow.

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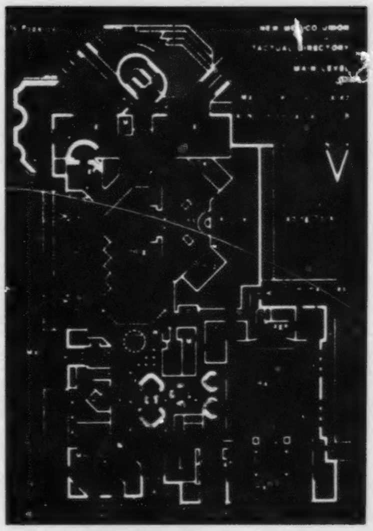
2 1/4"
3 3/8"
2

Institute for Environmental Education



Environments for Learning

CLOSE-UP

Rina Swentzell worked as a graduate architecture student with the Institute for Environmental Education on an intensive environmental project with the Albuquerque Indian School. In 1976, the Indian School had just been contracted by the All-Indian Pueblo Council and was sorely in need of renovation.

"We got involved with students, staff, and teachers to encourage them to look at their physical environment and to do something about it. The boarding school setting is a very foreign environment to most Indian students and there is little sense that they can participate in shaping that environment. It was exciting to see the school work together with the Indian community to fashion more amenable living and learning spaces. The whole experience was very special to me because I had lived through the Indian school experience myself years ago, being from the Santa Clara pueblo.

"There were a number of projects that ran during those two years, including classroom redesign, landscaping, and dormitory renovation. Preparatory classes were taught and then carried through weekly work days and summer work sessions. For example, an ethno-botany course resulted in major landscaping changes that included the contributions of the Indian community—adobe bricks, trees, desert shrubs, and soil.

"As the students' interest in their environment grew, they began to take more control over it. For example, one participating architect with the help of some students designed a bed-study unit to improve the dormitories, although resources and space were limited. The result was a compact unit composed of closet, study area, bed, and storage space. The older students, the seniors in particular, were not at all happy with this, as we found out in one session when they took out their disapproval on the furniture itself. They felt that the units were fine for younger kids—seventh graders—but the confined structures didn't fit their image of what they wanted, which was more space and flexibility. Fortunately, we reached a welcome compromise, putting the seniors to work on renovations of existing rooms, building partition walls and sitting areas to their liking, while the younger students eagerly helped build the study units for their dorms."

TITLE:
Institute for Environmental Education

INSTITUTION: The School of Architecture and Planning and the College of Education of the University of New Mexico

GRADE LEVEL: College, adults (teacher training)

RESOURCE TYPE: Courses, workshops, research, monograph series, slide presentations, community services

SUBJECT AREAS: Environmental education relating to all academic disciplines

TOPICS COVERED: Architecture and planning, built environment and environmental design, environmental psychology

SETTING FOR USE: Teacher training, indoor and outdoor sites for design activities

INFORMATION:
Dr. Wolfgang F. E. Preiser
Co-Director
Dr. Anne P. Taylor
Co-Director
Institute for Environmental Education
University of New Mexico
2414 Central S. E.
Albuquerque, NM 87106

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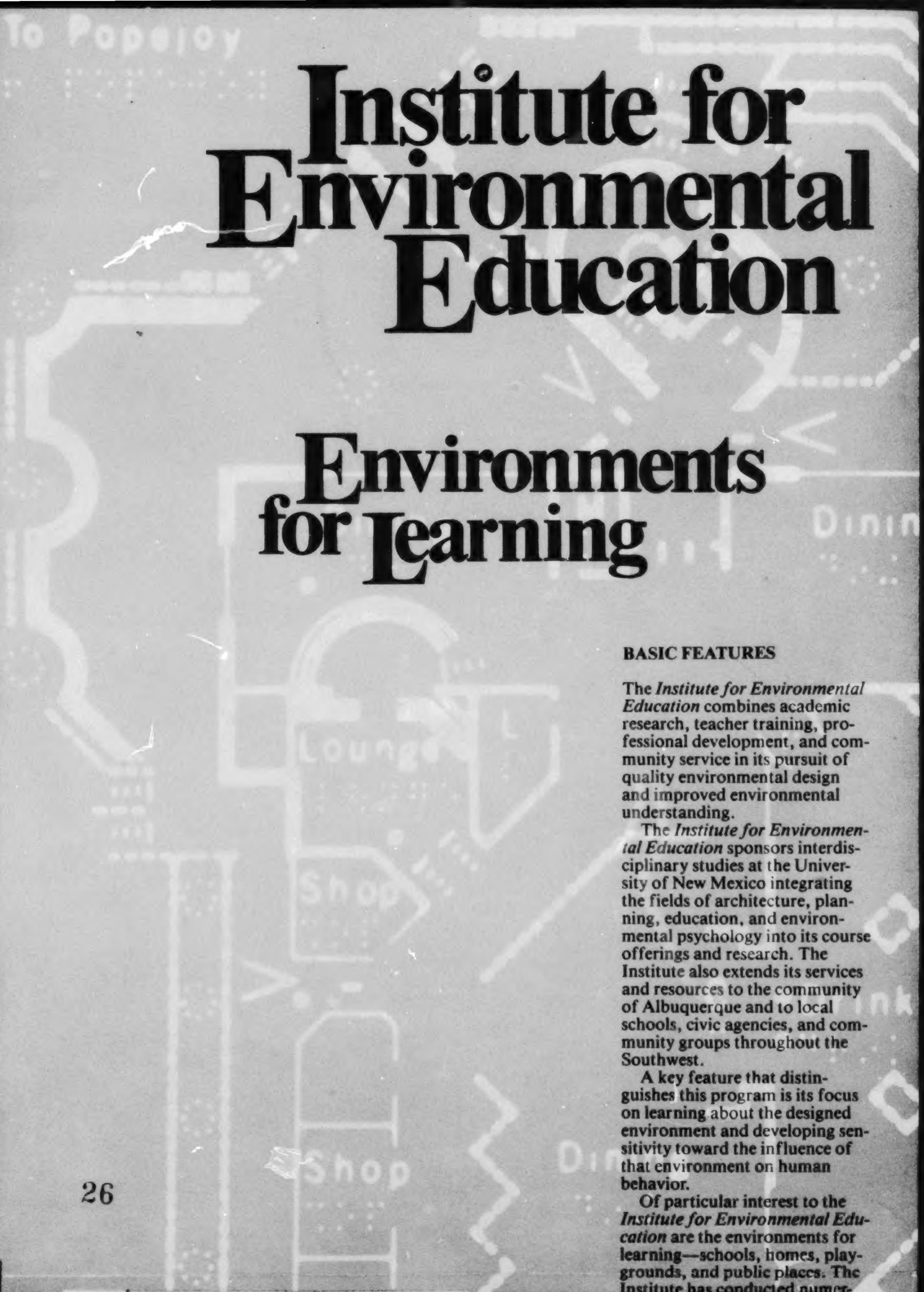


Institute for Environmental Education

Environments for Learning

BASIC FEATURES

The *Institute for Environmental Education* combines academic research, teacher training, professional development, and community service in its pursuit of quality environmental design and improved environmental understanding.

The *Institute for Environmental Education* sponsors interdisciplinary studies at the University of New Mexico integrating the fields of architecture, planning, education, and environmental psychology into its course offerings and research. The Institute also extends its services and resources to the community of Albuquerque and to local schools, civic agencies, and community groups throughout the Southwest.

A key feature that distinguishes this program is its focus on learning about the designed environment and developing sensitivity toward the influence of that environment on human behavior.

Of particular interest to the *Institute for Environmental Education* are the environments for learning—schools, homes, playgrounds, and public places. The Institute has conducted numer-

grounds, and public places. The Institute has conducted numerous studies and design projects on alternative environments that enhance learning opportunities for young people, adults, disabled and handicapped persons, and specific cultural groups such as native Americans and Hispanics.

This special perspective on environmental education thus includes not only learning about the environment, but also learning *because* of the environment. The *Institute for Environmental Education* promotes an awareness in designers and educators of the impact of specific dimensions of the environment on learning and recommends alternative designs for reinforcing and enhancing learning processes.

PROGRAM DESCRIPTION

The *Institute for Environmental Education* is co-sponsored by the University of New Mexico's School of Architecture and Planning and the College of Education. Two co-directors are assisted by design and education students on various research projects and study programs.

Within the Design and Behavior component of the School of Architecture and Planning, the *Institute for Environmental Education* presently offers seven courses and special research and thesis credits. For example, "Introduction to Design and Behavior" focuses on environmental influences on human behavior through case studies in schools, housing, playgrounds, prisons, and hospitals. "Exploring Albuquerque's Environment" provides educators and student teachers with teaching methods and skills to introduce environmental education into existing school curricula through investigations of Albuquerque's natural and human systems. "Learning Environments for Special People" addresses design requirements for handicapped and disabled persons in various learning settings—schools, hospitals, playgrounds, day care centers, homes, and recreation sites. Additional course listings deal with a variety of design and behavior topics and current issues.

Under the guidance of the Institute's co-director, Dr. Preiser, research projects which include rural/urban playground analyses, post-occupancy evaluation studies, energy consumption and conservation, and tactile guidance systems for the visually handicapped have been conducted. Future research projects are planned in aesthetic assessment studies, cross-cultural research into the relationships between environment and human behavior and further post-occupancy evaluations. Theoretical work is also being developed on a construct for "habitability" which provides a conceptual framework for interrelating human behavior and the physical environment.

The Institute maintains an extensive library on design and behavior which is open to the public. The Institute also pub-

The *Institute for Environmental Education* has worked for several years in local schools making slide presentations, running workshops, and providing consultation on classroom and playground design. It has worked with school boards to influence the appropriation of funds for landscaping schools and incorporating playground design into their planning. The Institute also works with the Environmental Education coordinator in the Albuquerque school system and assists in the New Mexico Arts Commission Architects-in-Schools program. In addition, the Institute has provided services and referrals for the school district's Mentorship Program linking students with professional architects for career development opportunities.

PROGRAM DEVELOPMENT

Originated in 1977 with a grant from the National Endowment for the Arts, the *Institute for Environmental Education* was founded to train educators and architects in environmental design methods for schools, public institutions, and community groups, to teach about the built environment, and to design better indoor and outdoor learning environments.

Since its inception, the Institute has succeeded in meeting the challenge of developing and maintaining an interdisciplinary program within the traditional university structure. While cosponsored by the University of New Mexico's School of Architecture and Planning and the College of Education, the Institute has developed fiscal autonomy through the sale of monographs and slide presentations, design consultation, and research grants, thus assuring the freedom and flexibility necessary to program direction and development.

Funding from a variety of sources—The National Endowment for the Arts, the National Endowment for the Humanities, the National Science Foundation, the University's Research Allocations Committee Fund, and the ARCO Foundation—have supported numerous research projects over the years.

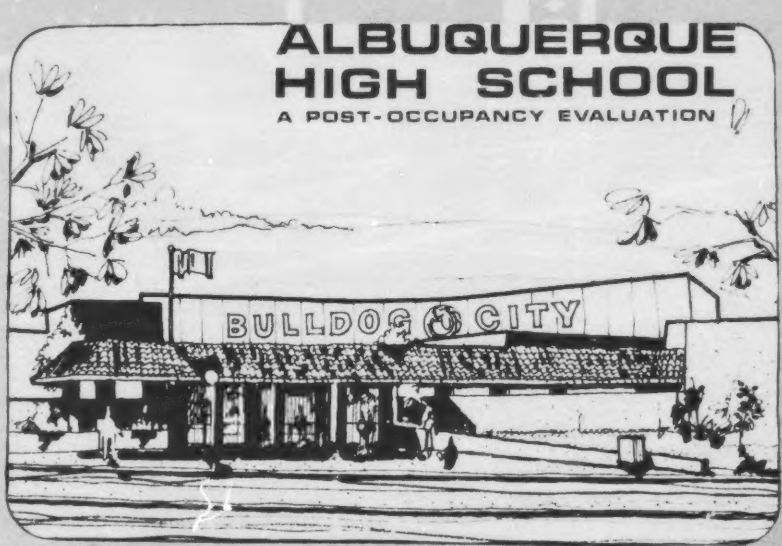
The Institute has gained prominence locally and throughout the state through its many ongoing design projects with schools and other public institutions, such as the Navajo Methodist Mission Academy and the New Mexico School for the Visually Handicapped. National recognition has come from the National Endowment for the Arts' Grant Recognition Award for Excellence in Public Education and Awareness. The Institute received a Commendation for Design Excellence from the United States Department of Transportation for a tactile building directory for the visually handicapped.

In 1980, the Institute cosponsored the national conference of the National Association for Environmental Education (NAEE) in Albuquerque. It was at this conference, under the aegis of the Institute, that the issue of built environment education was first addressed by this national body.

Recently, the Institute was instrumental in publishing a series of articles in the *Albuquerque Journal* highlighting the quality of life in Albuquerque and addressing local and state design and planning issues.

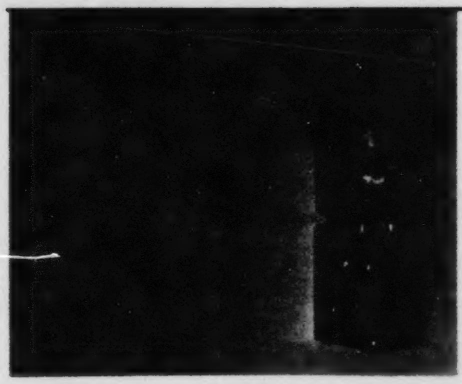
public. The Institute also publishes a monograph series to share work in progress, disseminate research findings, and make available out-of-print publications by affiliated authors and researchers. Monograph topics include participatory planning for Navajo school facilities, design guidelines for school playgrounds, and behavioral comparisons in open and closed school plans. Also in monograph series is an annotated international bibliography assembled by the Institute's co-director, Dr. Taylor. This work, *Ideas for Built Environment Education,* cites books, periodicals, monographs, kits, packages, films and filmstrips, organizations and museums in the field.

A number of slide presentations have been developed and are available for sale or rental. A variety of design and environment topics are covered: indoor and outdoor learning environments for children, learning graphics, math in art and architecture, and design guidelines for various learning environments.



	Another Look	A-I-S Planning Workbook	Art, Culture and Environment	Biological Environmental Pictorial Investigations	Bridges, Skyscrapers, Domes	Building: The Fight Against Gravity	Care of a Small Planet	Central Park Workbook	City Building Educational Program	Connections (Appropriate Technology)	Connections (Community Potential)	The Curious Naturalist	Design Activities for the Classroom	Draw!	Eco-Antics	Encounter with the Northwest Environment	Environmental Concerns	Environmental Education Activities Manual	Environmental Encounter	Essence I and II	First Steps in Ecology	Green Box	A Guide for Teaching Regional Environmental Planning	Historic Preservation Education	Human Environments and Natural Systems	Investigating Your Environment	The Mystery Tour	Notes on Architecture	Our Man-Made Environment	People in Places	A Place to Live	Problem Solving in the Man-Made Environment	Save the Earth	Shelter: Models of Native Ingenuity	Streets	Sunship Earth	Symbiosis 3	Understanding the Game of the Environment	We Can Help
GRADE LEVEL																																							
K–3	●		●				●		●	●		●			●			●		●	●	●		●		●				●			●						●
4–6	●		●			●			●	●		●	●		●			●		●	●	●		●		●	●			●	●		●	●	●		●		●
7–8			●	●	●	●	●	●				●	●	●				●	●	●		●				●			●	●		●		●	●	●			●
9–12			●			●		●			●			●		●	●	●	●	●			●		●	●				●		●						●	●
College–Adult		●				●					●			●		●			●	●					●	●		●		●		●						●	
SUBJECT AREA																																							
Art	●	●	●		●			●	●	●		●	●	●				●	●	●				●				●	●	●		●	●	●	●	●	●		
Language Arts							●	●				●		●					●	●				●			●			●			●			●			●
Math						●			●	●								●		●	●			●			●						●			●			●
Science				●		●	●	●		●		●				●	●	●	●	●	●		●		●	●	●		●		●		●			●	●		●
Social Studies		●	●		●		●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●
RESOURCE TYPE																																							
Teacher Guide	●	●	●			●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●			●	●	●		●	●	●	●		●
Student Resource	●			●	●		●	●			●	●		●	●		●		●	●		●			●			●	●	●	●	●	●	●			●	●	●
SETTING FOR USE																																							
Classroom	●		●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
Studio	●		●		●	●					●		●	●					●	●				●					●	●		●		●	●				
Lab						●	●			●		●							●	●							●												
School Grounds						●						●						●	●	●	●			●			●			●						●			●
Field Trip					●			●		●	●	●			●	●		●	●	●	●	●	●	●		●	●		●	●	●	●	●		●	●			●

	Another Look	A-I-S Planning Workbook	Art, Culture and Environment	Biological Environmental Pictorial Investigations	Bridges, Skyscrapers, Domes	Building: The Fight Against Gravity	Care of a Small Planet	Central Park Workbook	City Building Educational Program	Connections (Appropriate Technology)	Connections (Community Potential)	The Curious Naturalist	Design Activities for the Classroom	Draw!	Eco-Antics	Encounter with the Northwest Environment	Environmental Concerns	Environmental Education Activities Manual	Environmental Encounter	Essence I and II	First Steps in Ecology	Green Box	A Guide for Teaching Regional Environmental Planning	Historic Preservation Education	Human Environments and Natural Systems	Investigating Your Environment	The Mystery Tour	Notes on Architecture	Our Man-Made Environment	People in Places	A Place to Live	Problem Solving in the Man-Made Environment	Save the Earth	Shelter: Models of Native Ingenuity	Streets	Sunship Earth	Symbiosis 3	Understanding the Game of the Environment	We Can Help
COMMUNITIES Neighborhoods, towns, cities and suburbs How communities work, what form they take, what forces shape them							●	●	●		●				●	●	●	●	●	●		●	●		●	●	●		●	●	●			●	●				
STRUCTURES AND TECHNOLOGY Shelters, materials and tools How buildings work, how they are constructed, how they change over time		●			●	●		●	●	●			●							●					●	●		●				●		●			●		
ENVIRONMENTAL BEHAVIOR Human behavior and interaction with the environment How people use space, why people alter their environment, how can environmental problems be solved							●	●	●	●	●						●	●	●	●		●	●		●		●		●	●		●	●	●		●			
DESIGN The process of creating form and space What are basic design considerations, what is the design process, how do people perceive and appreciate design	●	●	●		●			●	●		●		●	●					●					●				●	●			●		●	●			●	
HERITAGE Historical forces affecting the environment How local history affects the contemporary environment, why architectural styles and historic buildings are valued, how cultural heritage influences the use of space			●				●	●			●	●					●		●	●		●		●	●		●										●		
NATURAL LAWS Ecological principles of the biosphere How natural systems work, how matter and energy flow, what constitutes ecological imbalance				●			●					●						●			●				●	●										●		●	●
ECOSYSTEMS Naturally bounded habitats for life What sustains an ecosystem, what limits and capacities exist, how dynamic equilibrium works				●			●					●			●	●	●	●		●	●	●	●		●	●					●					●		●	●
EARTH RESOURCES Elemental resources Where they come from, how they are consumed, how they are regenerated				●			●	●		●		●				●	●	●		●	●	●			●	●					●		●	●		●			●



Another Look

Mary Ross Townley

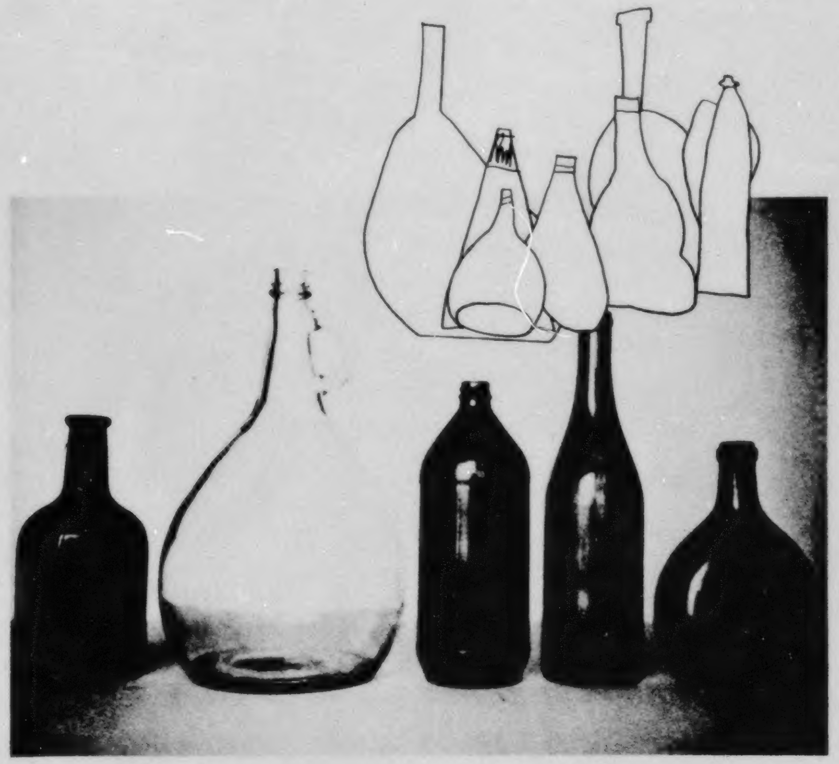
1978

Softbound, illus., student books, teacher manuals, guides for use with older students

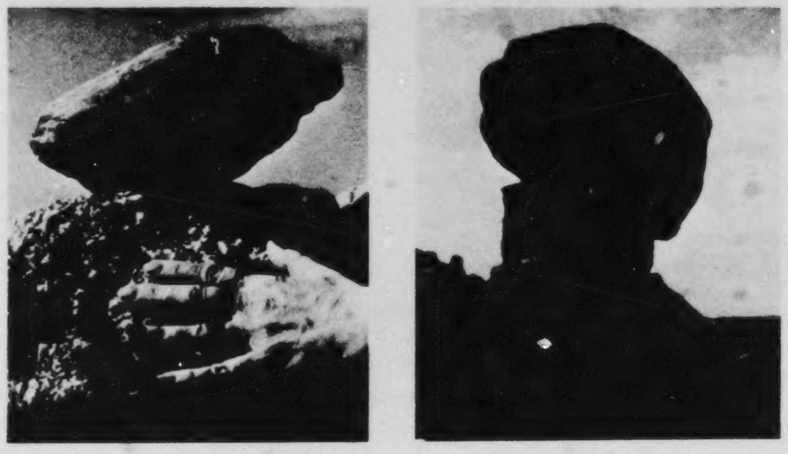
$6.64, student book, each level
$10.00 teacher manual, each level
$3.40, guide for older students, each level

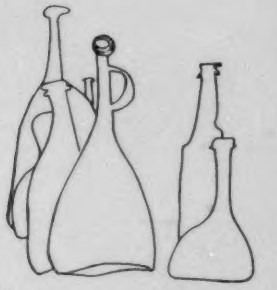
Addison-Wesley Publishing Co.
2725 Sand Hill Rd.
Menlo Park, CA 94025

Excellent comparative photos. Another Look *gets high marks for imagery and imagination.*
Environmental education specialist

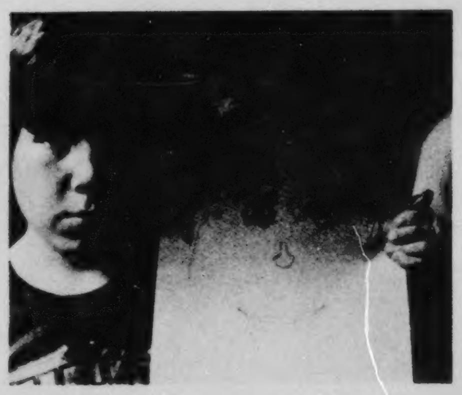


How large are these rocks?





Self portraits can be successful and satisfying experiences for even the youngest student when based on preparatory exercises to develop or sharpen perceptual skills. Unlike the more usual arts-and-crafts approach which often dominates the art experiences of very young children, these workbooks are primers for visual literacy.



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Another Look offers a special approach to visual awareness and creativity for kindergarden and elementary school students. The program provides three levels of experiences progressing from basic visual elements to complex concepts of perception.

Large illustrated workbooks—Levels A, B, and C—are accompanied by teacher editions for K-3. Additional guides adapt each level for use with older students. The teacher editions offer introductory material on the overall program and survey the basic elements of shape, location, position, structure, space dominance, scale, texture, light or color, point of view, illusion, and synthesis. Advice on materials, equipment, and progress reports is also given.

Each level includes sixteen units which are fully scripted in the teacher editions, starting with a look at the illustrated elements, transfering observations to creative activities and exercises, discussions of artists, and interpretation of visual elements and their meanings.

The student workbooks are filled exclusively with black and white and color illustrations—photographs, line drawings, art reproductions, and white space for student drawing. Several of these pages are used directly in the unit activities by being cut up and rearranged, modified and assembled, or copied.

Another Look is a bold commitment to visual literacy at the elementary level and is sufficiently developed and structured for use by teachers with no background in art. The program is particularly successful in integrating visual perception with environmental awareness, drawing on a vast array of images in nature and the human-designed environment.

GRADE LEVEL	
K-3	●
4-6	●
7-8	
9-12	
College-Adult	

SUBJECT AREA	
Art	●
Language Arts	
Math	
Science	
Social Studies	

RESOURCE TYPE	
Teacher Guide	●
Student Resource	●

SETTING FOR USE	
Classroom	●
Studio	●
Lab	
School Grounds	
Field Trip	

An Activity To Try

Looking at the Forms

1. Look at the pictures that have both **rough** and **smooth** parts. Does the roughness make the smooth parts seem smoother? Do the smooth parts make the rough parts look rougher?

Can you see exactly where the **smooth** parts end and the **rough** parts begin in "The Kiss," picture 7?

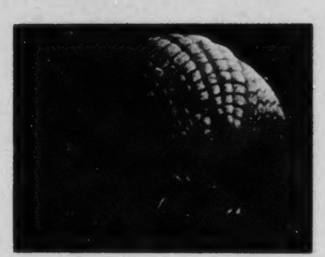
2. There are three circles under picture 1. Choose the circle that has a surface most like the surface in picture 1. Color that circle. [Make sure the children understand what to do before letting them proceed.]

Color the circle next to each picture which has a surface most like the surface in the picture. [Record the children's choices on your record sheet.]

● ● ●●

● ● ●●

● ● ●●



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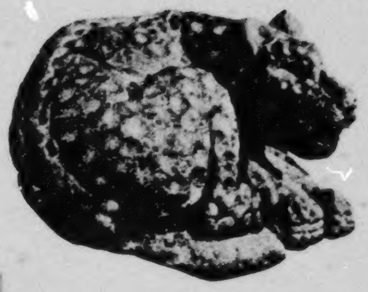

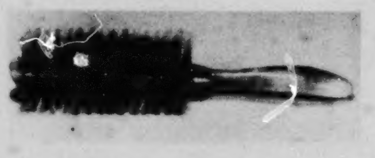

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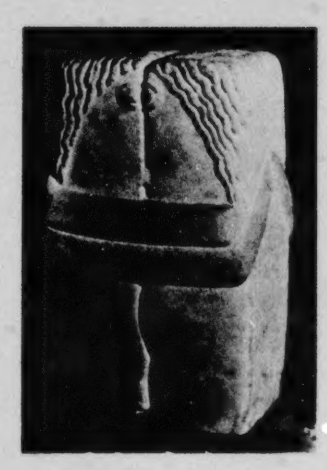

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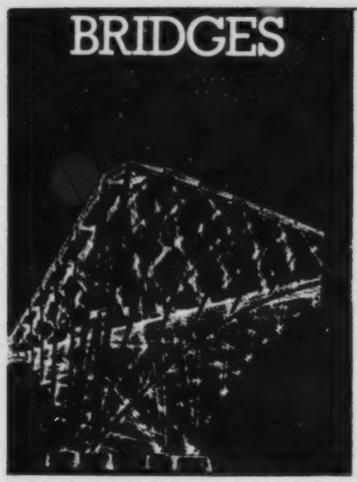


SKYSCRAPERS

Bridges
Skyscrapers
Domes

Anne and Scott MacGregor

1980, 1981, 1980

Softbound (hardbound also available), 56 pp., illus.

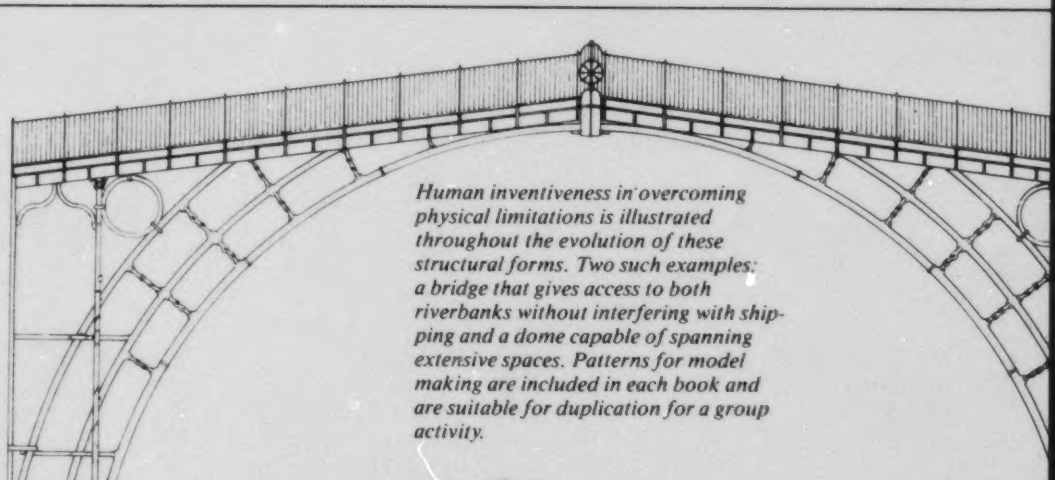
$5.95 each

ISBN 0-688-41997-6, ISBN 0-688-008720-4, ISBN 0-688-00365-6

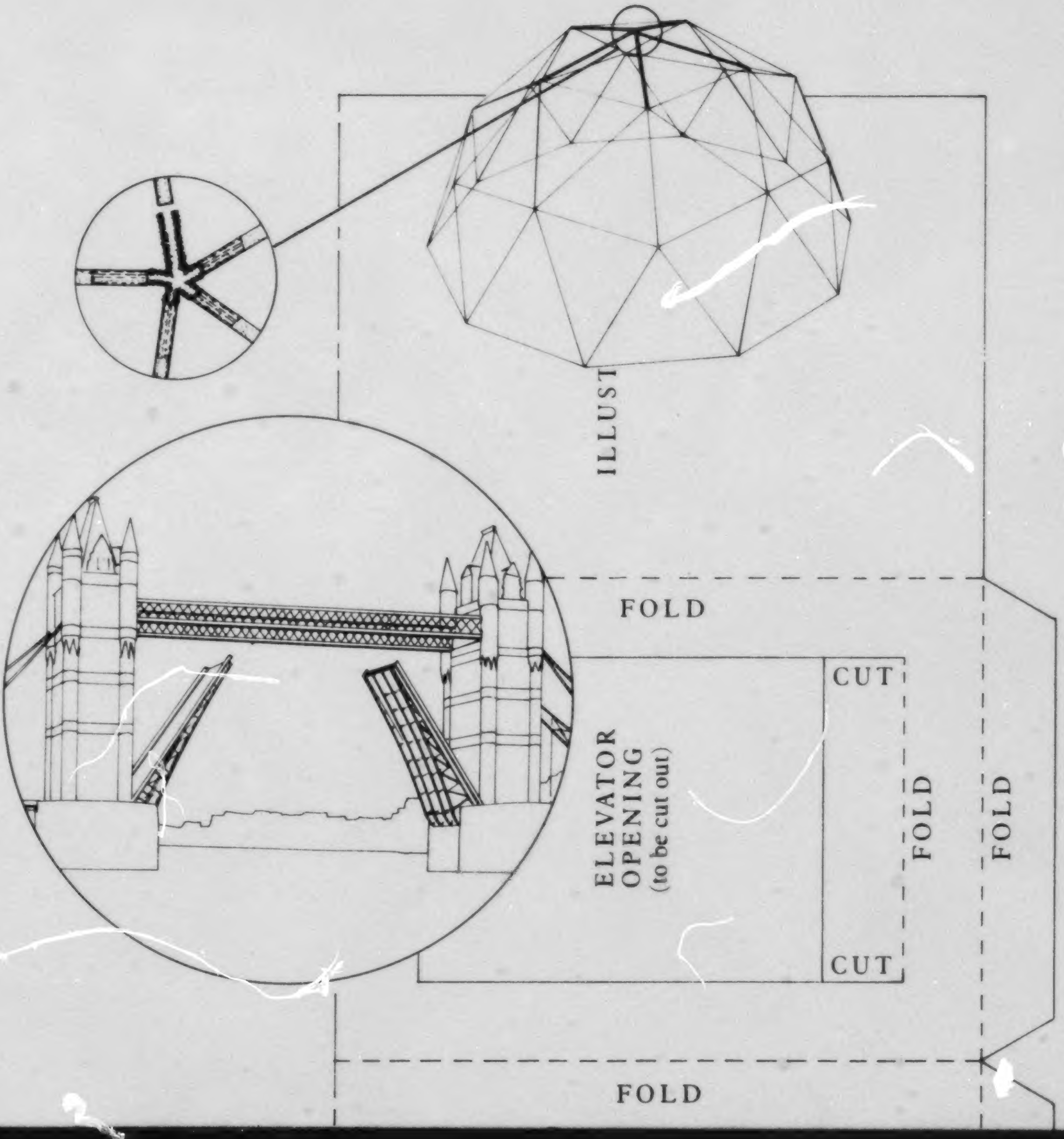
Lothrop, Lee & Shepard Books
William Morrow & Co., Inc.
105 Madison Ave.
New York, NY 10016

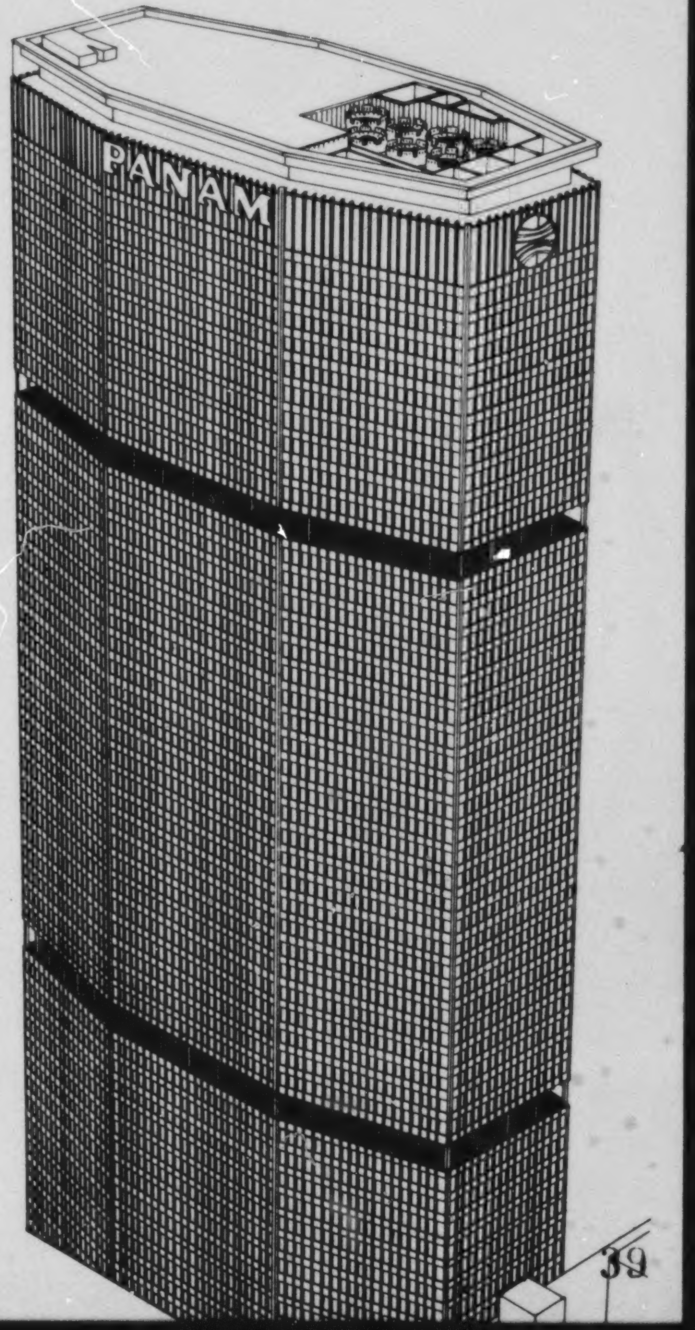
The MacGregors' books introduce the basic engineering principals behind these different structures. The construction projects, aided by a touch of history, are easily assembled and should lead to intriguing variations by a seventh grade class.

Environmental education consultant



Human inventiveness in overcoming physical limitations is illustrated throughout the evolution of these structural forms. Two such examples: a bridge that gives access to both riverbanks without interfering with shipping and a dome capable of spanning extensive spaces. Patterns for model making are included in each book and are suitable for duplication for a group activity.





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Bridges, Skyscrapers, and *Domes* are individual project books for middle school students on the engineering, architecture, and history of these structures. Each book is illustrated with skillful pen and ink drawings; simple construction projects using readily available materials exemplify the rudimentary lessons in structure and architectural history.

Bridges traces the evolution of beam, arch, and suspension bridges through time with examples drawn from around the world. Three projects, the most workable in this series, offer tangible experiences in bridge building principles.

Skyscrapers takes the closest look at its subject—exploring foundations, framing, services, environmental controls, and architectural ornamentation. The project is a series of activities that leads to a large skyscraper construction complete with a working elevator.

Domes, the most recent addition to the series, progresses from Eskimo igloos to the Dymaxion Dwelling Machine, providing two projects for table-top construction of platform and geodesic domes.

These project books can provide seventh and eighth graders with an initial grounding in standard structures. The projects themselves can lead to more creative individual and class designs. While the historic treatments may appear too abstract, teachers can make them more concrete through the use of local examples.

GRADE LEVEL	
K-3	
4-6	
7-8	●
9-12	
College-Adult	

SUBJECT AREA	
Art	●
Language Arts	
Math	
Science	
Social Studies	●

RESOURCE TYPE	
Teacher Guide	
Student Resource	●

SETTING FOR USE	
Classroom	●
Studio	●
Lab	
School Grounds	
Field Trip	●

An Activity To Try

[Ed.'s Note: Because of the nature of this resource, no activity accompanies this entry.]

Central Park Workbook

Activities for an Urban Park

Central Park Workbook:
Activities for an Urban Park

Robert J. Finkelstein

Central Park Task Force 'Park As School' Program

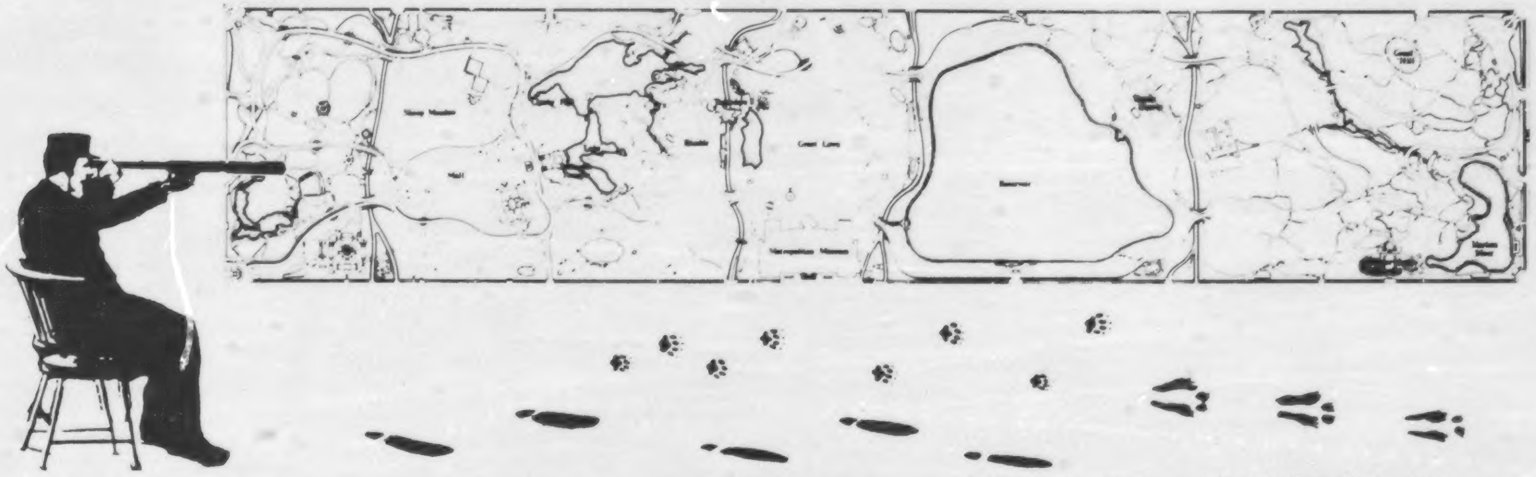
1980

Spiralbound, 54 pp. illus.

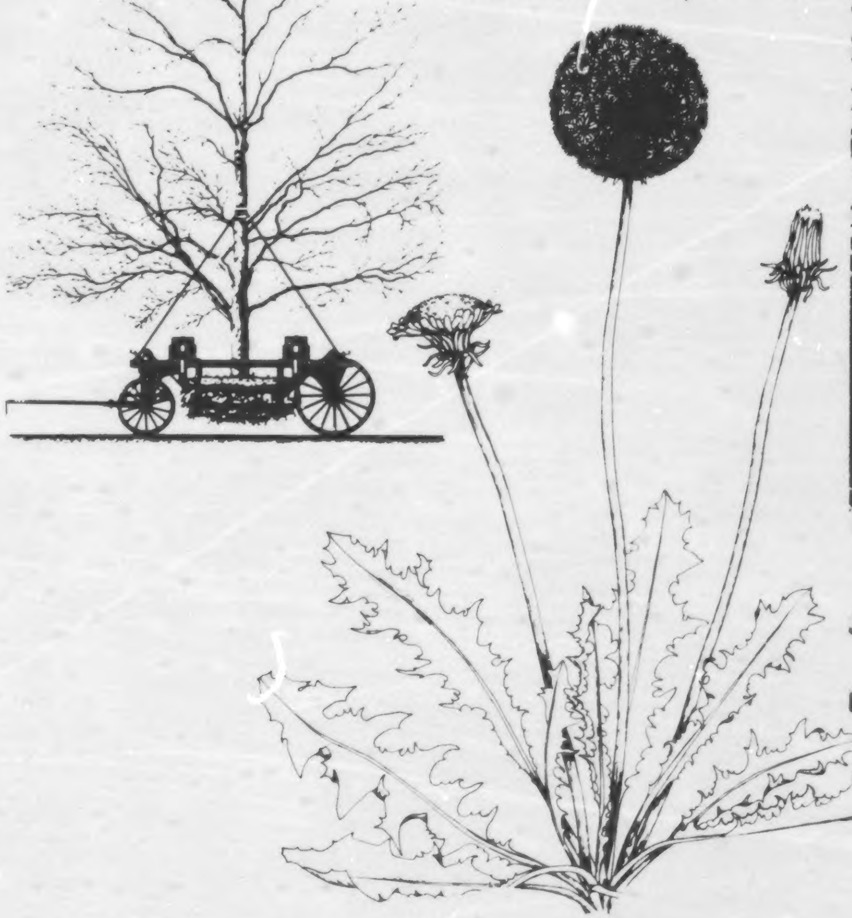
$3.95

The Central Park Conservancy
The Arsenal Building
830 Fifth Ave.
New York, NY 10021

Imaginative, simple activities that can be carried out in any park with a minimum of materials and preparation. Underlying concept is "discovery."
Environmental education consultant



As a work of art, as nature in the city, as a setting for events and activities, the urban park offers exciting learning opportunities to all. This resource, although inspired by Central Park, Frederick Law Olmstead's masterwork, is a rich interplay of activities that can be adapted for use in any park setting.



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Central Park Workbook is a unique resource for students and teachers of all grades interested in exploring their own urban parks. With New York City's Central Park as the reference base, this guide provides ample opportunities for outdoor investigations of design with nature.

Central Park Workbook is structured around three concepts of the urban park as a work of art, a source of nature in the city, and a setting or stage for community events and recreation. Along with the recommended Park Explorers Back Pack and Work Kit, the *Workbook* equips teachers and students with ideas, background questions, history, and insights into the design and use of urban parks. Every chapter provides imaginative activity suggestions from building a park box to reading the landscape in rocks and soil to tracking animals to park poetry.

This guidebook can be used in any number of ways through any—preferably many—subject areas. It succeeds artfully in generalizing the specific field experiences in this country's first urban park to the reader's own environment. Written in a lively, engaging style, the *Workbook* offers a refreshing perspective on the compatibility of human design and nature.

Central Park Workbook is the result of four years of development and field testing by the Central Park Task Force 'Park As School' Program.

GRADE LEVEL	
K-3	
4-6	
7-8	●
9-12	●
College-Adult	

SUBJECT AREA	
Art	●
Language Arts	●
Math	
Science	●
Social Studies	●

RESOURCE TYPE	
Teacher Guide	●
Student Resource	●

SETTING FOR USE	
Classroom	●
Studio	
Lab	
School Grounds	
Field Trip	●

Activities To Try

A Park is Architecture

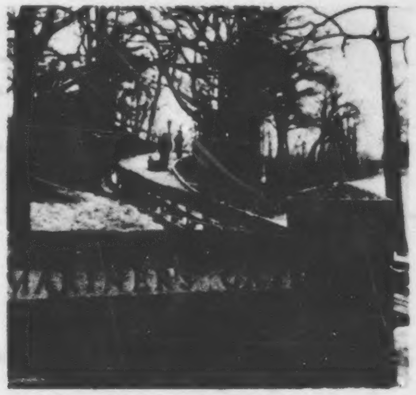
Seeing the park as a built place will give it a new meaning all its own. Don't expect to be able to think this way without practice. But all the stuff you know about buildings will set you on the right track.

A Park is like a Building?

Well, what makes a building anyway? Gather together a kind of dictionary definition that includes parts and uses of buildings. How about creating a cartoon! A cartoon that shows those parts and uses: the function of the building as well as how the building is connected to the street. If list-making is easier for you, make a list. Think about indoors and outdoors, and how and where they are connected in a house. Then think of what parts a building has on the inside and on the outside. Think of what the building is made of, and the different systems that a useful building needs. Just what is it about the structure that makes all these parts work together as one whole building? Perhaps you want to include also the different people that were needed to build your building. An outline drawing might make it easier to see the answers. If you write words on it in balloons you'll end up with a building cartoon. The next step is to find connections between this cartoon and your park. Many of the analogies are there. They really are. Can you find them?

An Invitation and a Barrier

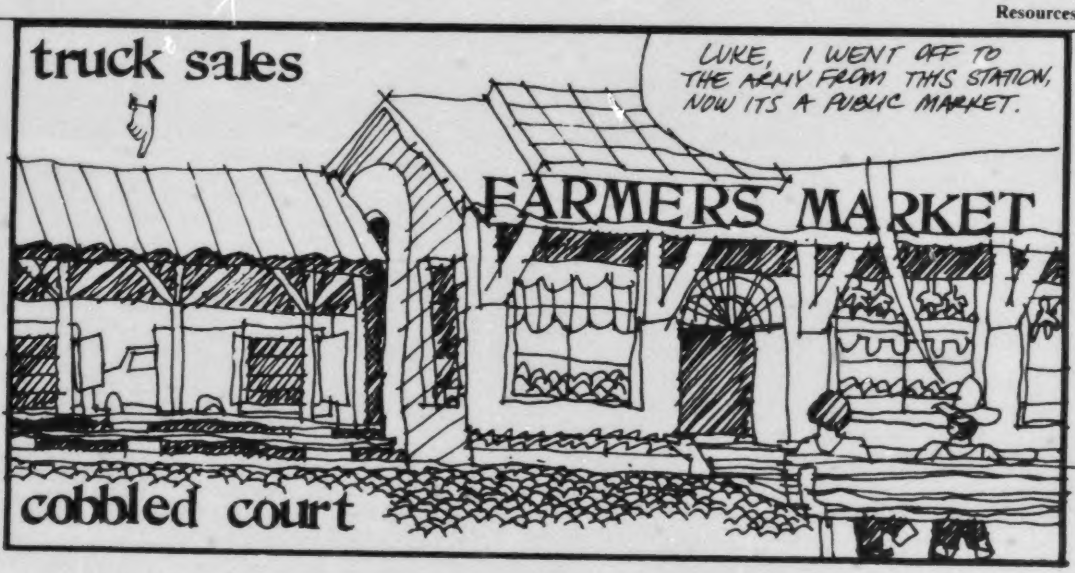
Think of a doorway, any doorway. What message would it give if it could speak? Make several small pictures of different doorways and their messages. If you compare your sketches with those of other people, you're bound to learn a lot about different kinds of exits and entrances. Think of a cathedral, a mansion, a jail, or department store. What do doorways tell you about what's inside, or who is welcome? Try your hand at designing an entrance that makes a statement. How about a doorway for school or your own room? Make it large enough to stand up—cardboard is good for this. Do you want to know what messages your door gives other people? Pass out small bits of paper for comments. Doing this with a whole bunch of people and their doors can be fabulous. Now that you have so much information about public and private spaces and their doorways, think about how this all works in parks. Start planning *your* park entrances.



CONNECTIONS

Ways to Discover and Realize Community Potential

Jim Burns


truck sales
LUKE, I WENT OFF TO THE ARMY FROM THIS STATION, NOW ITS A PUBLIC MARKET.
FARMERS MARKET
cobbled court

Connections: Ways to Discover and Realize Community Potential

Jim Burns

1979

Hardbound, 155 pp., illus.

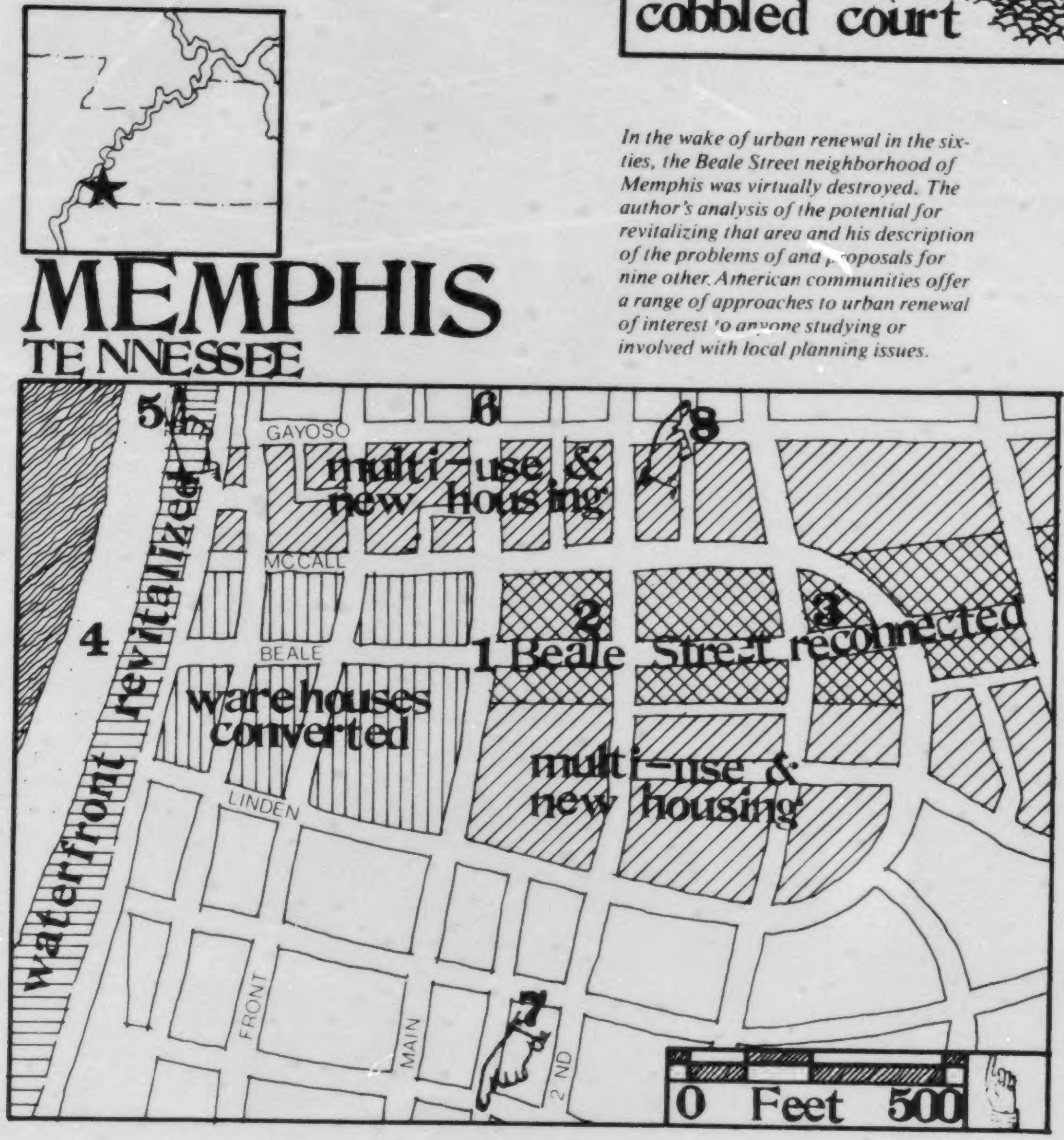
$28.00

ISBN 0-07-009205-2

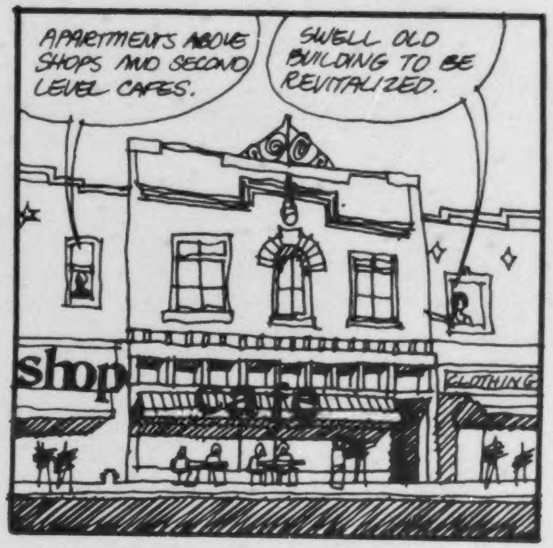
McGraw-Hill Book Co.
1221 Avenue of the Americas
New York, NY 10020

The case studies include a perceptive critique of the planning approaches. These would be useful classroom readings (for example with a social studies unit). Especially good if you're in one of the ten cities discussed.

Professor of architecture


MEMPHIS
TENNESSEE
GAYOSO
MCCALL
BEALE
LINDEN
FRONT
MAIN
2 ND
1 Beale Street reconnected
2
3
4
5
6
7
8
multi-use & new housing
warehouses converted
multi-use & new housing
waterfront revitalized
0 Feet 500

In the wake of urban renewal in the sixties, the Beale Street neighborhood of Memphis was virtually destroyed. The author's analysis of the potential for revitalizing that area and his description of the problems of and proposals for nine other American communities offer a range of approaches to urban renewal of interest to anyone studying or involved with local planning issues.


APARTMENTS ABOVE SHOPS AND SECOND LEVEL CAFES.
SWELL OLD BUILDING TO BE REVITALIZED.
shop
cafe
CLOTHING

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Connections is a thoughtful summary of planning issues and approaches to community improvement. Written for the lay person as well as for professional architects, planners, and public officials, *Connections* also offers teachers and high school students a spectrum of planning topics and case studies to relate to their own communities.

Connections starts off with concise illustrated statements on the physical and non-physical dimensions of cities and towns, their continuity and change over time. Models for community planning and design processes are simplified to progress from awareness to perception, decision-making to implementation through citizen participation.

The heart of the book lies in the case studies of ten urban areas, each illustrating different planning problems and opportunities. Through comparative photographs, sketches, and maps, each case study makes connections over time—past to present—and over space, to other designed communities. The "Notions" section at the end of each case study encourages readers to relate what they have just learned to similar issues in their own communities.

Connections can be used to generate class discussion and individual or group projects. It comes highly recommended as supplemental reading for urban studies courses. Based on the professional experience of its author in the field of community design and planning, *Connections* succeeds in making specific planning issue accessible to a broad audience.

GRADE LEVEL

- K-3
- 4-6
- 7-8
- 9-12 ●
- College-Adult ●

SUBJECT AREA

- Art
- Language Arts
- Math
- Science
- Social Studies ●

RESOURCE TYPE

- Teacher Guide ●
- Student Resource ●

SETTING FOR USE

- Classroom ●
- Studio ●
- Lab
- School Grounds
- Field Trip ●

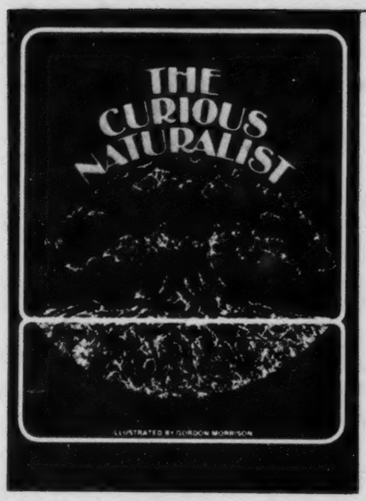
An Activity To Try

Rituals and Celebrations

Everywhere you look, someone or some group is investing the scene with a ritual, ceremony, or celebration that is important to them. It may be an official event sanctioned by tradition and religious or governmental institutions. It might be an atavistic rite with its roots in the dim past, half understood but no less enthusiastically performed. It might be an everyday occurrence, such as saying grace before supper or singing "The Star Spangled Banner" at a Rotary Club meeting. It might be a complete unofficial spontaneous eruption of joy or rage, gladness, or mourning. Whatever it is and wherever it takes place, it will make you aware of many values and qualities about the place and those people.

Novelist Robert Coover has said: "The point of a ceremonial return to dreamtime is basically regenerative: to recover belief in the tribe and get things moving again. The best social orders run down with time, and so occasionally you have to tear it all apart and start over. Primitive societies set aside a time each year to do this on a ritual basis. Get drunk, break all the rules, commune with the primordial chaos and the dreamtime of the civilizers, recapture the sense of community and thus of order."

Become aware of why, where, and when people celebrate and observe rituals together. What kinds of festivals, eisteddfods, fais-do-dos, wappenschawings, luaus, ferias, rodeos, corborees, minnesingings, knock-down-drag-outs, kermesses, hoe-downs, fêtes champêtres, and jamborees do people like to put on? What connections do they have with religious, ethnic, or cultural traditions? How do they use the community for their celebrations? How can these occasions become events for other people to share and increase their pleasure in their community?


THE CURIOUS NATURALIST
ILLUSTRATED BY GORDON MORRISON

The Curious Naturalist:

John Mitchell

The Massachusetts Audubon Society

1980

Softbound (hardbound also available), 192 pp., illus.

$15.95

ISBN 0-13-195404-0

Prentice-Hall, Inc.
Englewood Cliffs, NJ 07632

Nice, down-to-earth approach to interacting with the natural world. Provides some fine insights into resources, how to acquire and use them.

Environmental education
state coordinator

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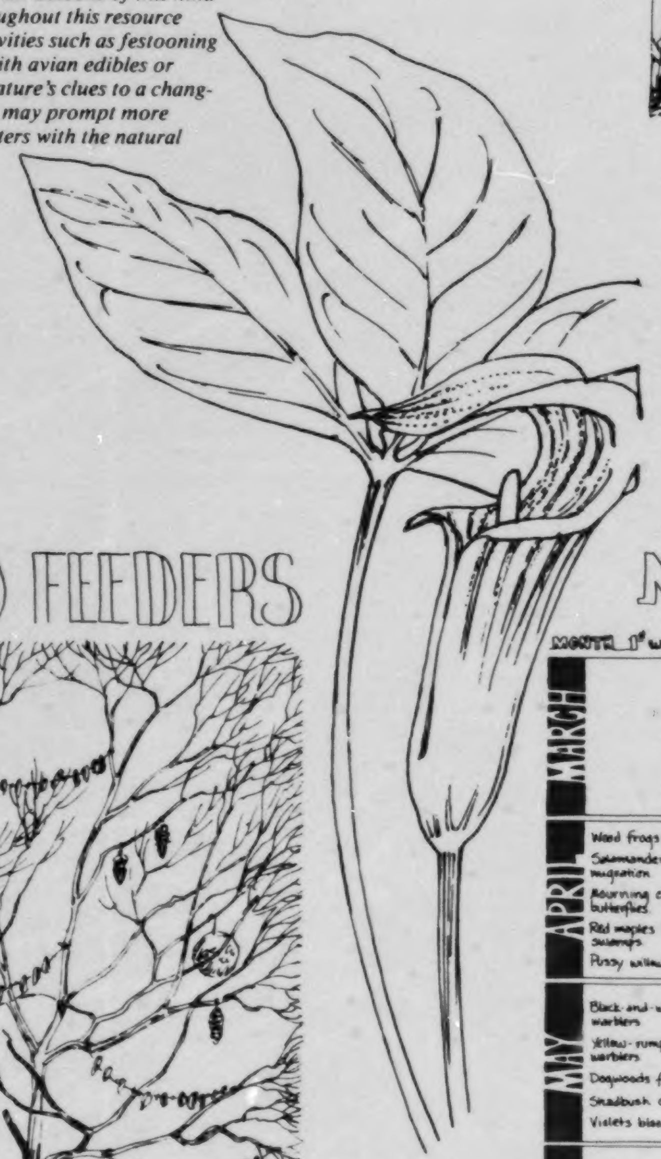
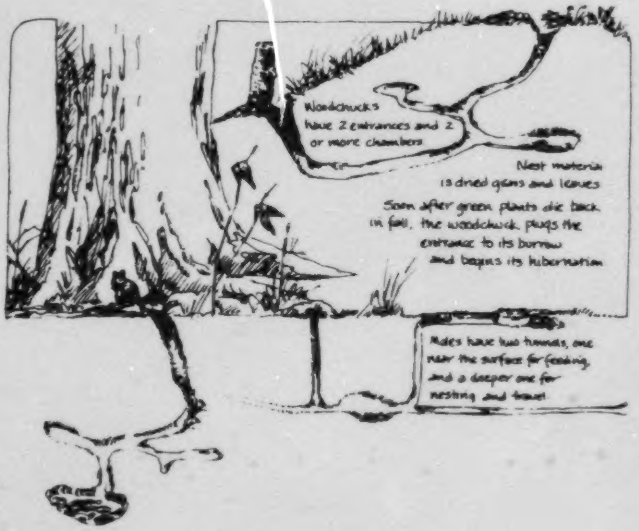
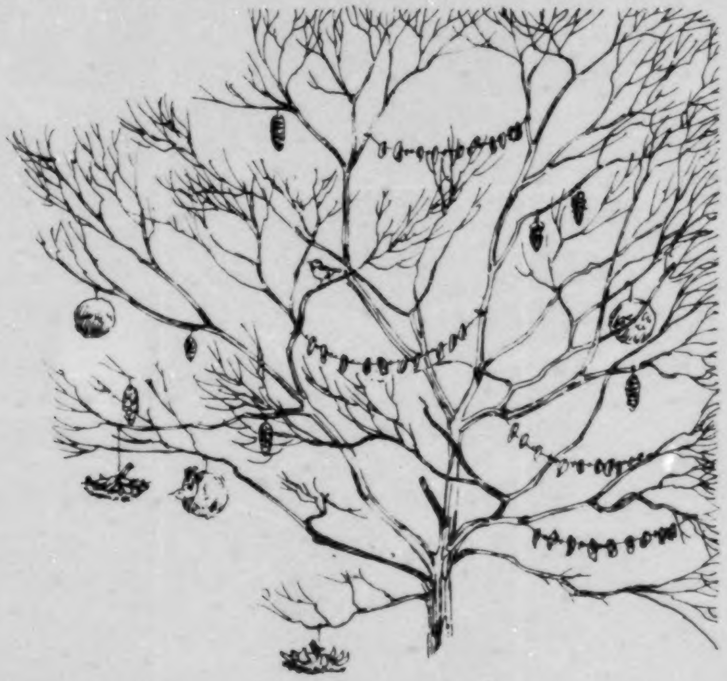
Learning to read the skies, the floor of the forest, or the leaves of a plant are skills which extends one's enjoyment of the natural world. Lessons of this kind are found throughout this resource along with activities such as festooning a winter tree with avian edibles or watching for nature's clues to a changing season that may prompt more serious encounters with the natural world.




Woodchucks have 2 entrances and 2 or more chambers
Nest material is dried grass and leaves
Soon after green plants die back in fall, the woodchuck plugs the entrance to its burrow and begins its hibernation
Moles have two tunnels, one near the surface for feeding, and a deeper one for nesting and travel

NATURAL BIRD FEEDERS



A CALENDAR OF NATURAL EVENTS

MONTH	1st week	2nd week	3rd week	4th week
MARCH				Skunk cabbage well up Blackbirds, robins and song sparrows have returned Shoots of day lily up
APRIL	Wood frogs call Salamander migration Mourning cloak butterflies Red maples bloom in swamps Pussy willows out	Spring peepers call Tree swallows return Phoebes Forsythia blooms	Spring azure butterflies Toads call House wrens Spicebush blooms	Catbirds Swifts and barn swallows Birch catkins out Quaker-ladies bloom
MAY	Black-and-white warblers Yellow-rumped warblers Dogwoods flower Shadbush out Violets bloom	Warbler migration Rose-breasted grosbeaks Tanagers Columbine blooms Bloodroot flowers in open woods	Indigo buntings Great crested flycatchers Lilacs bloom Dandelions out Buttercups	Wood pewees Flycatchers Apple trees flower Canada mayflowers bloom
JUNE	Young mammals leave nests Wild geraniums and viburnums bloom	First brood of young birds leave nests Ox-eye daisy Orange hawkweed	First cutting of hay Day lily flowers Partridgeberries Lady's slipper	

The Curious Naturalist introduces the marvels of nature to readers of all ages. Moving through the seasons, the book offers observations and anecdotes, crafts and projects to enhance the beginnings of nature study. Seasonal essays start each section and calendars of natural events summarize each season's activities.

Each page of hand-lettered text and careful line drawings offers a story about curious natural phenomenon. References for further reading are provided throughout in addition to a topical bibliography in the back.

Naturalist is best used as a starting place for environmental inquiry and a stimulus for local field trips. The emphasis is on individual observations of nature—what bees do in winter, how the shadbush got its name, how to identify frogs by their croaks, what life is like under a rock. This is not a systematic reference for natural history; there is no index or table of contents. Rather it offers a place to begin, to look closer, to ask questions.

Naturalist is filled with information based on years of collective field experiences. It is oriented to common phenomena found in backyards, local parks, and nature centers. Young students will enjoy browsing; questions they never thought to ask will undoubtedly come to mind.

The material in this book first appeared in the magazine of the same name published by the Massachusetts Audubon Society.

GRADE LEVEL	
K-3	●
4-6	●
7-8	●
9-12	
College-Adult	

SUBJECT AREA	
Art	●
Language Arts	●
Math	
Science	●
Social Studies	

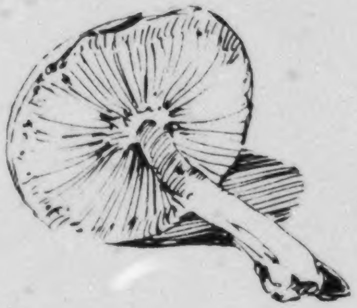
RESOURCE TYPE	
Teacher Guide	●
Student Resource	●

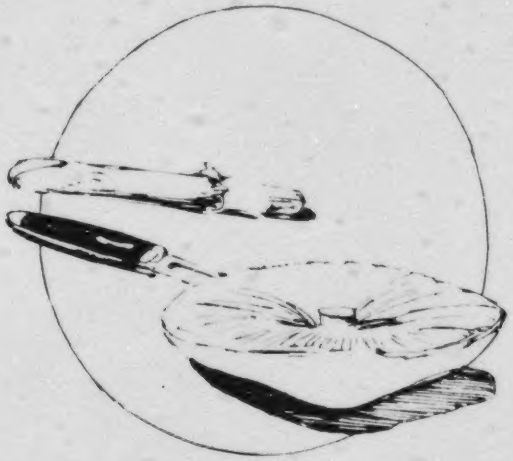
SETTING FOR USE	
Classroom	●
Studio	
Lab	●
School Grounds	●
Field Trip	●

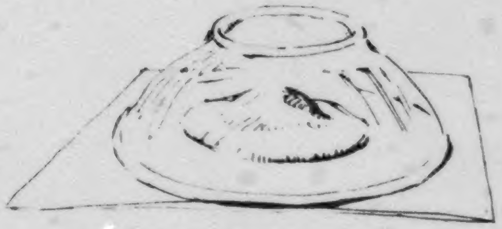
An Activity To Try

How to Make Spore Prints

One of the first steps in identifying a mushroom is finding the color of the spore. Spores are continuously raining from the gills of the mature plant. You can collect them on a sheet of paper.



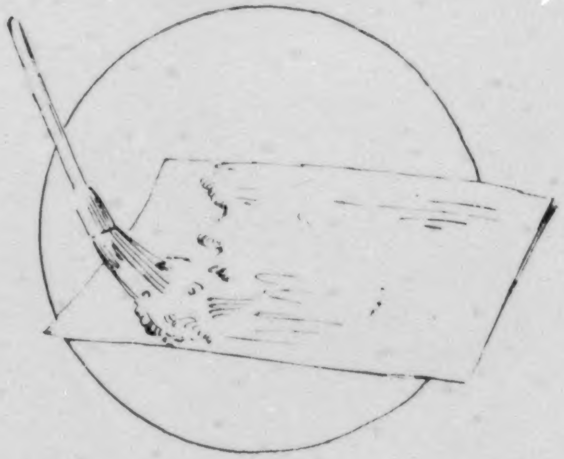


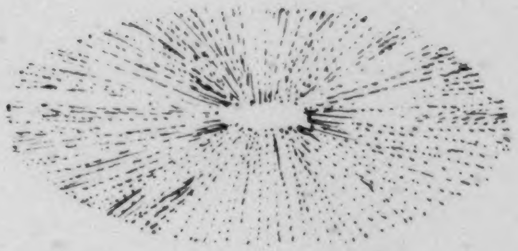


1. Cut mushroom off at stem.

2. To preserve the spores, coat a sheet of construction paper with gum arabic.

3. Place the mushroom face down on the paper. Cover with a bowl and let it sit overnight. Carefully remove mushroom cap from paper in the morning.





The finished print: some of the spores are beautifully colored, and the designs are always interesting. To preserve the spore print, spray it with a fine varnish spray. Be sure to spray very lightly so as not to disturb the spores, and give the print several coats.

DESIGN ACTIVITIES FOR THE CLASSROOM JOHN LIDSTONE

Design Activities for the Classroom

John Lidstone

1977

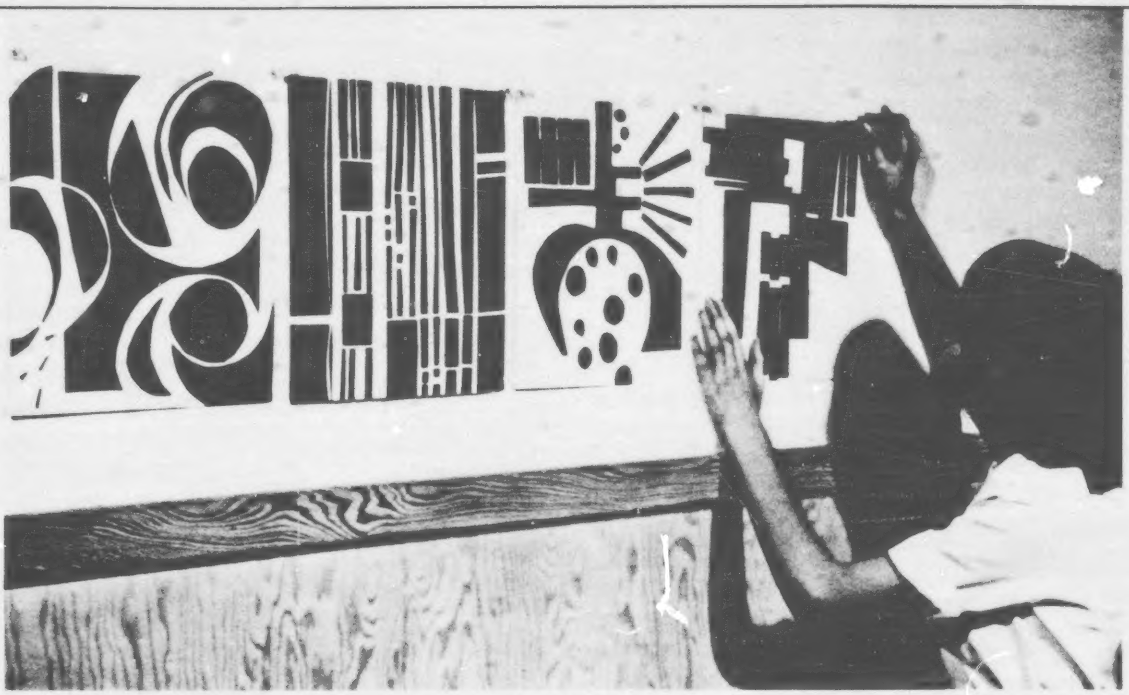
Hardbound, 104 pp., illus.

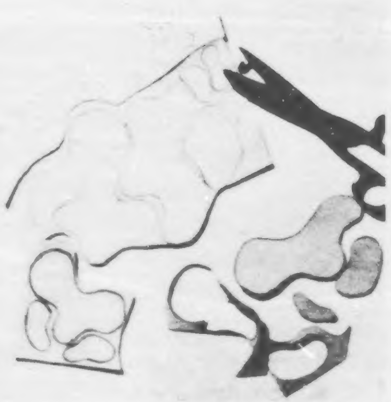
$10.95

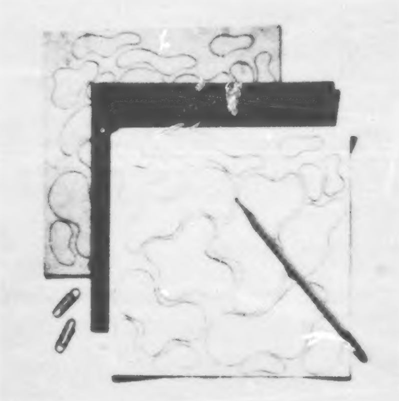
ISBN 0-87192-091-3

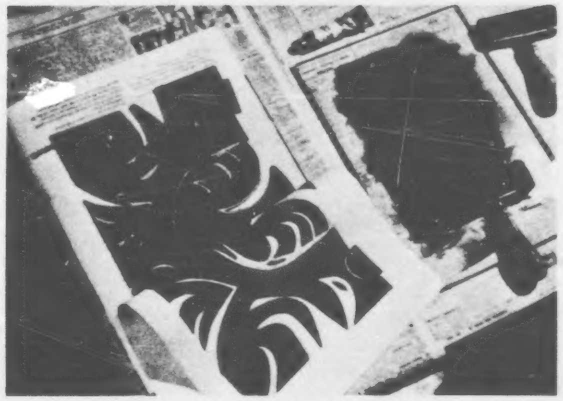
Davis Publications, Inc.
50 Portland St.
Worcester, MA 01608

A fine starting place for teachers in elementary grades who want to broaden their creative base. The design process is illustrated through a variety of simple art activities.
Environmental arts teacher

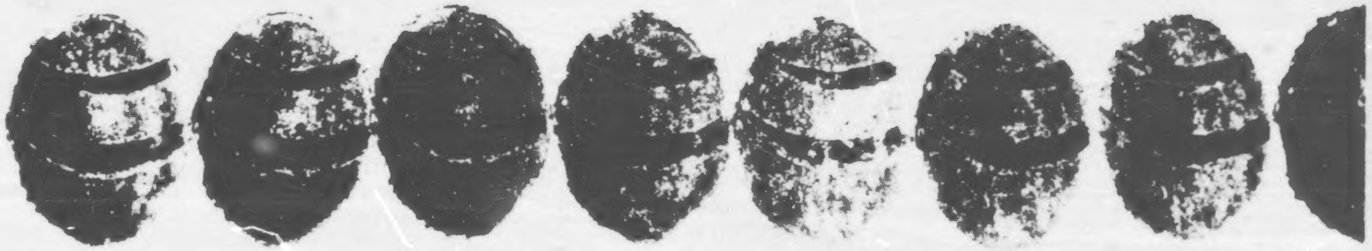








Lively and original art emerges when children are presented with the opportunities to work with media appropriate to their interests and to design objects both from an individual perspective and as members of a group.



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Design Activities for the Classroom is an introductory guide to artistic design processes, techniques, and materials for elementary and junior high school teachers. In addition to providing a succinct presentation of design concepts and contexts, *Design Activities* presents well-charted activities in a variety of art media.

Articulate, illustrated background essays offer connections between design and nature, the environment, primitive and contemporary art. Practical discussion of children's artistic potential and enthusiasm is matched by suggestions from the author's experience as an art teacher on teaching techniques, classroom organization, and art supplies. The design process, from experimentation through resolution, is also very simply expressed.

Based on the author's premise that good design comes out of materials put to appropriate use, activities in over fifteen different media expose students to a variety of design techniques from free style painting, to straw and wire sculpture, to potato printing, to xerox design.

Expanded and refined from the original edition published in the early sixties, *Design Activities* is a sensitive and sensible introduction to the design process, particularly useful to the general studies teacher with little or no background in art education. The author points out that "classroom teachers above anyone else have an intimate knowledge of their students' enthusiasms, skills and attitudes and can more easily integrate art and design with other subjects."

GRADE LEVEL

K-3
4-6 ●
7-8 ●
9-12
College-Adult

SUBJECT AREA

Art ●
Language Arts
Math
Science
Social Studies

RESOURCE TYPE

Teacher Guide ●
Student Resource

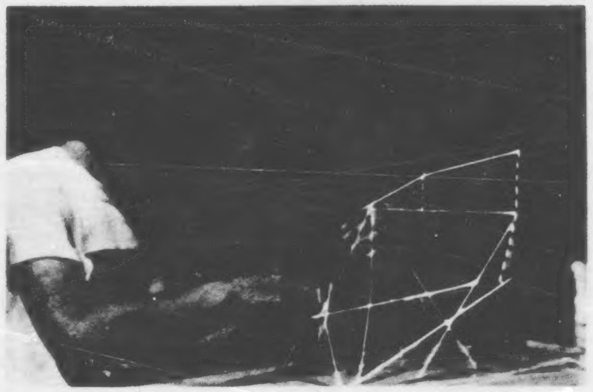
SETTING FOR USE

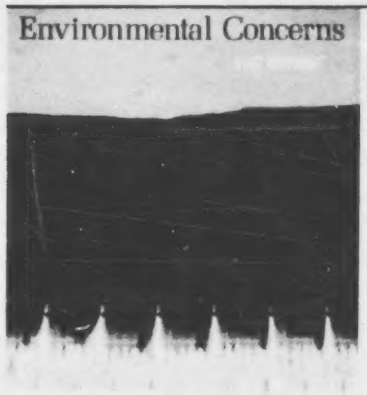
Classroom ●
Studio ●
Lab
School Grounds
Field Trip

An Activity To Try

Building a Straw Design

1. Building a straw design is an architectural undertaking. The design should look good and stand upright, too. So, first, experiment with a few straws. Try to find the means to construct a base that will be sturdy but, at the same time, graceful.
2. Once a plan for a base has been worked out, the parts are cemented together with a quick-drying glue.
3. Straws may be cut to any size and glued directly to other straws or cut at an angle to fit more snugly. Pins can be used also to hold parts together until the glue dries, then pulled out.
4. Other pins can be pushed through certain straws to make permanent supports. . . . . .
5. . . . . . . for other straws . . . . . .
6. . . . . . . which are glued in place but rest on the support pins. Pinning and gluing some of the straws in the construction in this manner will make it extremely sturdy so that elements can be "cantilevered" out from the central section, to bring excitement and a sense of daring to the completed sculpture.
7. Once the basic parts of a design are in place one can experiment with different arrangements of straws until an appealing sculptural design is found. In this photograph a pin is put in at a slant as the straw that fits on to it is meant to lean out at an angle.
8. Inspect the project from all sides to see if it has achieved a design quality that is aesthetically satisfying. If it is, the sculpture is finished. All that remains to do is to check its construction to see that all parts are firmly glued in place and unnecessary pins removed.




Environmental Concerns

Environmental Concerns
THE WORLD

Environmental Concerns, The Nation
Environmental Concerns, The World

George Peter Gregory and Robert E. Sweeney

Social Studies Curriculum Center
Carnegie-Mellon University

1977

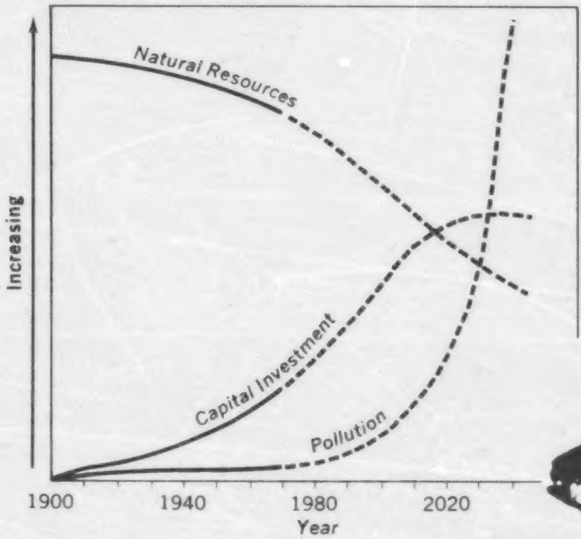
Softbound, 122 pp. **(The Nation)**, 167 pp. **(The World)**, illus.

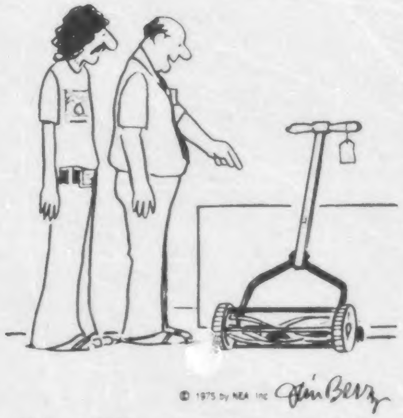
$4.95 (student text)
$1.50 (teacher manual)

ISBN 0-15-366846-6, ISBN 0-15-366847-4

Harcourt Brace Jovanovich, Inc.
7555 Caldwell Ave.
Chicago, IL 60648

Both texts use tangible case studies in the real world to introduce concepts and planning solutions . . . . Unusually strong on politics of citizen action.
Environmental education consultant




© 1975 by NEA, Inc.

"This is a 1930s replica — a real nostalgia item — economical, nonpolluting, quiet and good exercise!"

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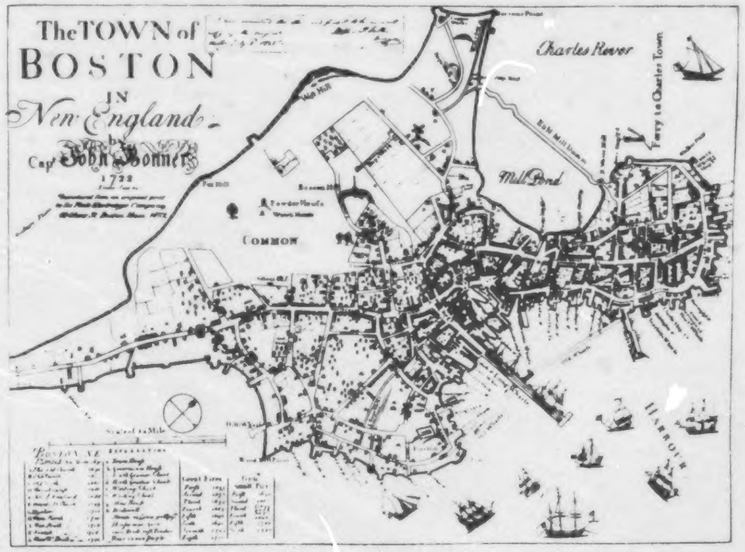
Boston Commons at one time exemplified the practice of community ownership of land for mutual economic benefit. While public lands today are more widely used for recreational rather than agrarian purposes, a return to the concept of individual and group responsibility for shared resources is mandatory—a theme repeated throughout this text.


The TOWN of BOSTON IN New England by Capt John Bonner 1722
Charles River
Ferry to Charles Town
Mill Pond
COMMON
HARBOUR

Environmental Concerns, The Nation and *Environmental Concerns, The World* are twin volumes which present a sociological perspective on environmental issues to secondary school students. *Environmental Concerns* is one of the most contemporary texts available for exploring environmental problems, alternative solutions, and citizen responsibility and involvement. The approach used in both volumes is similar, progressing from a statement of an issue, to case studies, to discussion topics and individual and group activities.

Environmental Concerns, The Nation builds on the theme of "The Commons" with case studies drawn from historical and current events. Citations are from a wide range of primary source materials. The particular forte of this volume is its emphasis on what private citizens can do both as individuals and as groups to make significant changes in environmental quality.

Environmental Concerns, The World offers an international treatment of environmental issues, the stresses that impinge on environmental quality, and the future choices available. The topics range from food production and industrial production to pollution, population growth, and supply of resources.

Accompanied by teacher manuals, both texts can be used as modular courses, separately or in sequence, as supplements to social studies courses or as an extension of an environmental science curriculum.

The values clarification approach is carefully integrated into the substantive and conceptual development of each chapter. A useful feature is the marginalia which includes definitions of unfamiliar terms, ancillary information, and bibliographic references.

GRADE LEVEL

K-3
4-6
7-8
9-12 ●
College-Adult

SUBJECT AREA

Art
Language Arts
Math
Science ●
Social Studies ●

RESOURCE TYPE

Teacher Guide ●
Student Resource ●

SETTING FOR USE

Classroom ●
Studio
Lab
School Grounds
Field Trip

An Activity To Try

Industry and Your Life

Below is a list of things that may or may not be part of your environment. How important to *you* is each item on the list? Number as *1* that item which you believe is most important to you for a life of good quality. Number as *2* the next most important thing in the list, and so on through *18*.

— improved medical care
— automobile
— daily newspaper
— television set
— plumbing and sewage system
— clean drinking and fishing waters
— place for sports
— dishwasher
— college education
— peaceful world
— air conditioner
— clean air
— telephone
— grassy area or park near your home
— vacation in a rural area
— good housing
— local library
— food of good quality

Check those items on the list that you believe depend on industrial production. Now look at the items you numbered among the important first ten. How many of these items depend on industrial production? Will industrial growth help *you* get those things you consider most important for a life of good quality?

Human Environments and Natural Systems
2nd Edition

N. J. Greenwood
J. M. B. Edwards

Human Environments and Natural Systems

N.J. Greenwood and J.M.B. Edwards

1979

Hardbound, 548 pp., illus.

$15.95

ISBN 0-87872-168-1

Duxbury Press
20 Providence St.
Statler Building
Boston, MA 02116

A textbook with the advantage of updated perspectives and data. Lots of real, relevant examples. Comprehensive issues are well explained and to the point without being simplistic.
Environmental education specialist

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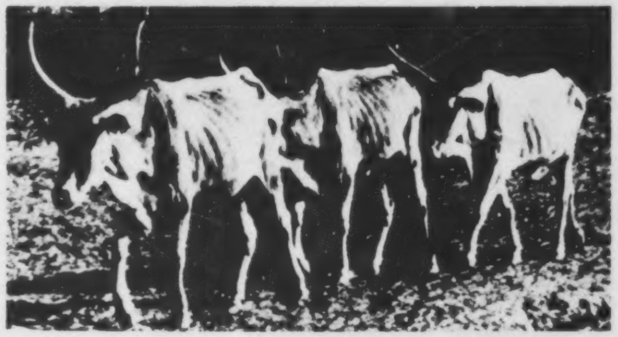
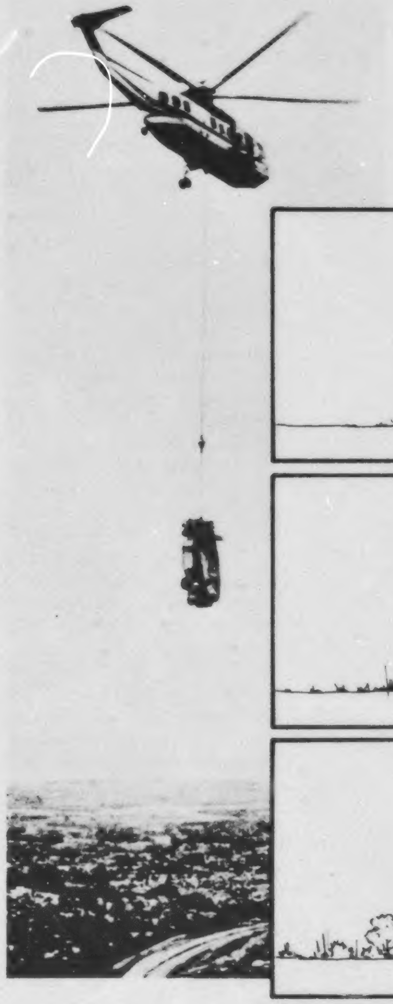
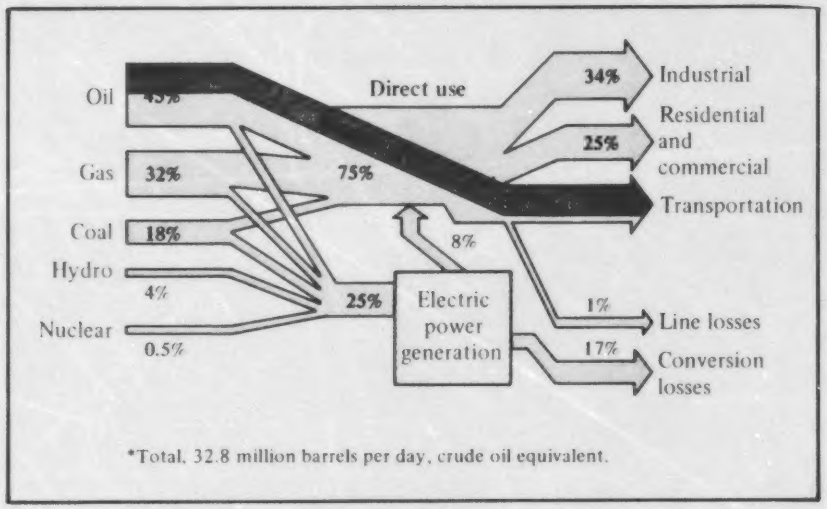


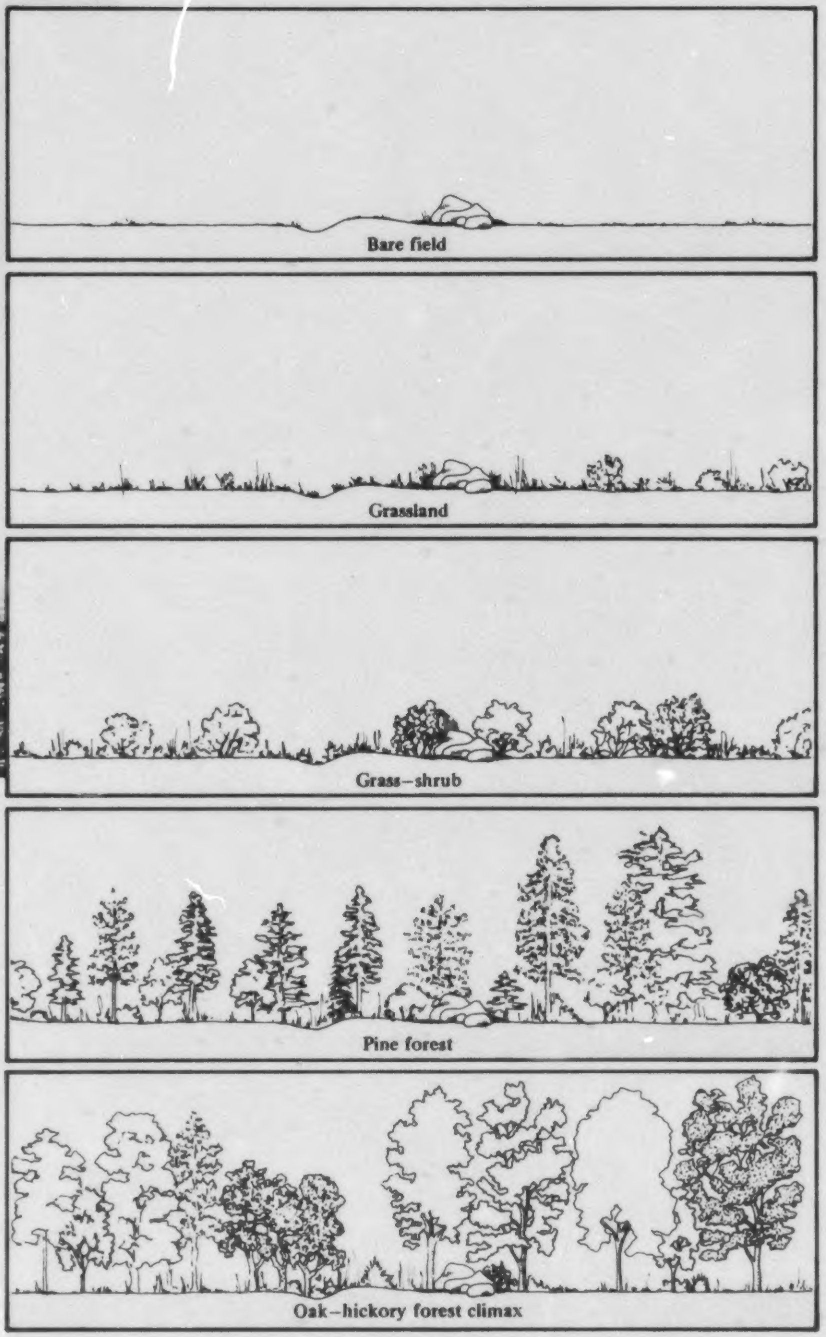
The negative effects of certain natural phenomenon can be compounded, and often are, by human impact. In a West African district, increasing population pressures led to even greater than normal devastation of livestock during a period of drought. Current photojournalism, graphs, charts, and line drawings document the fragile balance that exists between the human species and the natural world.





Oil
45%
Gas
32%
Coal
18%
Hydro
4%
Nuclear
0.5%
Direct use
75%
25%
Electric power generation
8%
34%
Industrial
25%
Residential and commercial
Transportation
1%
Line losses
17%
Conversion losses

*Total, 32.8 million barrels per day, crude oil equivalent.



Bare field
Grassland
Grass–shrub
Pine forest
Oak–hickory forest climax

Human Environments and Natural Systems is a basic textbook on environmental studies which offers up-to-date information on contemporary issues as well as a special emphasis on the economic and political dimensions of environmental quality.

Designed as a senior high school course on the environment, *Human Environments and Natural Systems* views the human species in conflict with the natural world and by its immediacy and sense of urgency underscores the need for considered solutions.

The text is divided into five major parts, exploring the dilemma of man and nature, the concept of limited resources, human waste systems, urban concerns, and management opportunities. A special feature of this text is its enhanced treatment of waste problems (solid, toxic, and radioactive) and the orientation to growth as problems in social and physical intensification. Not profusely illustrated, the text is, nevertheless, supported by well-chosen maps, tables, and graphs.

This is a sophisticated handling of environmental problems that tells it like it is and challenges its readers to consider the complexity of issues which must be resolved to assure future environments, both human and natural.

GRADE LEVEL

K-3 ___
4-6 ___
7-8 ___
9-12 ●
College-Adult ●

SUBJECT AREA

Art ___
Language Arts ___
Math ___
Science ●
Social Studies ●

RESOURCE TYPE

Teacher Guide ___
Student Resource ●

SETTING FOR USE

Classroom ●
Studio ___
Lab ___
School Grounds ___
Field Trip ___

An Activity To Try

[Ed.'s Note: Because of the nature of this resource, no activity accompanies this entry.]

NOTES ON ARCHITECTURE

Demystifying the contemporary practice of architecture through words and pictures is the ostensible intent of this book. But the interplay of verbal and graphic elements also manages to convey something of the architectural process itself and the principles of defining, classifying, and ordering so essential to it.

Notes on Architecture

Information Design Inc.

1982

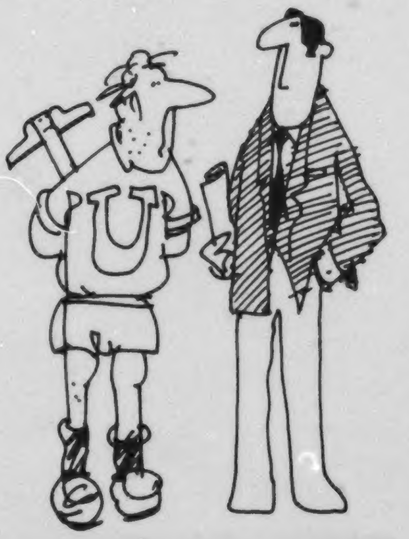
Softbound, 48 pp., illus.

$3.95

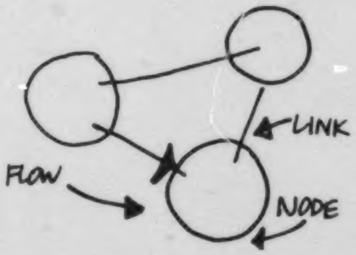
ISBN 0-86576-022-5

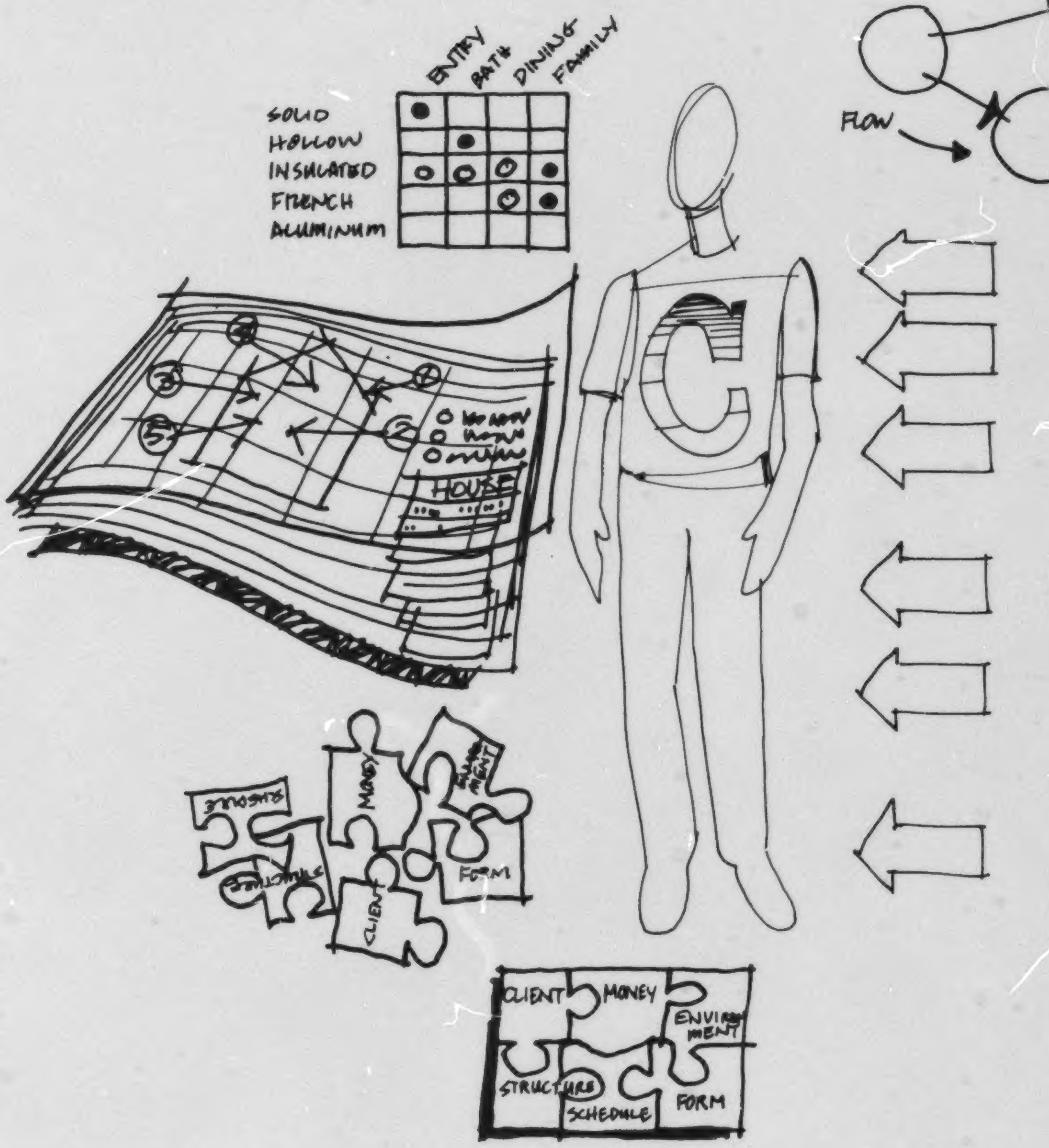
William Kaufman, Inc.
95 First St.
Los Altos, CA 94022

I wish I had seen this book while I was making my career choice. This makes architecture—and the related professions—understandable and accessible.
Environmental planner



PROFESSIONAL IMAGE


LINK
FLOW
NODE


ENTRY
BATH
DINING
FAMILY
SOLID
HOLLOW
INSULATED
FRENCH
ALUMINUM
HOUSE
C
SCHEDULE
MONEY
ENVIRONMENT
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CLIENT
FORM
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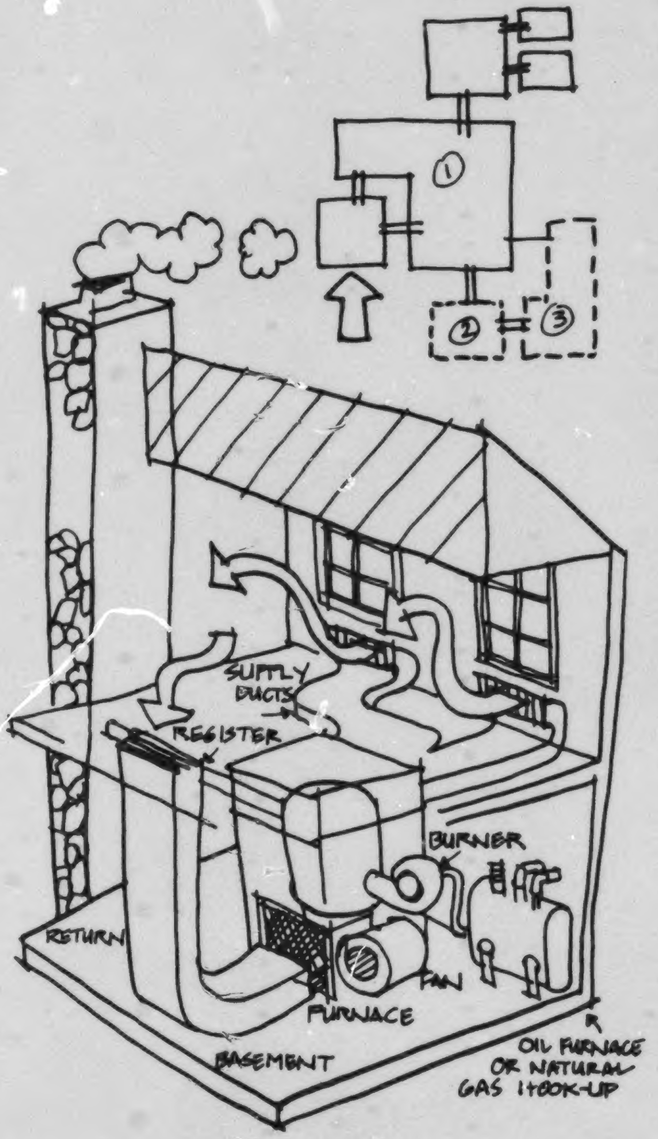
ENVIRONMENT
STRUCTURE
SCHEDULE
FORM


①
②
③
SUPPLY DUCTS
REGISTER
BURNER
RETURN
FAN
FURNACE
BASEMENT
OIL FURNACE OR NATURAL GAS HOOK-UP

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Notes on Architecture introduces the practice and profession of architecture to college and high school students considering architectural careers. Through brief explanations of the principles, tools, and skills employed by architects, this handbook is also a useful resource for any high school classroom architecture project.

Notes on Architecture presents straightforward, simply illustrated descriptions of the facets of building design, what architects do, and how they do it. The topics range from structural concepts and systems to building materials, the design process, the client-architect relationship, and the business of architecture. Necessarily simplifying these facets of architecture, this handbook does not address theory nor deal with complex technical issues. *Notes on Architecture* does provide concrete, tangible introductions to the basic processes of the profession.

Notes on Architecture can be used in career exploration programs, industrial arts classes, and design projects in the classroom.

Notes on Architecture presents the simple nuts-and-bolts of the profession to prospective architects.

GRADE LEVEL	
K-3	
4-6	
7-8	
9-12	
College-Adult	●

SUBJECT AREA	
Art	●
Language Arts	
Math	
Science	
Social Studies	●

RESOURCE TYPE	
Teacher Guide	
Student Resource	●

SETTING FOR USE	
Classroom	●
Studio	
Lab	
School Grounds	
Field Trip	

An Activity To Try

[Ed.'s Note: Because of the nature of this resource, no activity accompanies this entry.]

Shelter

Katonah Gallery

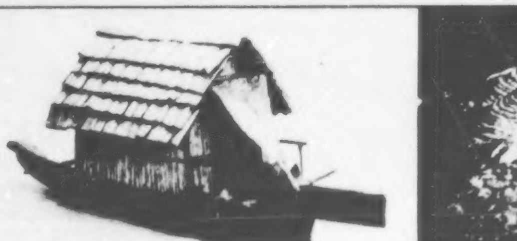
1982

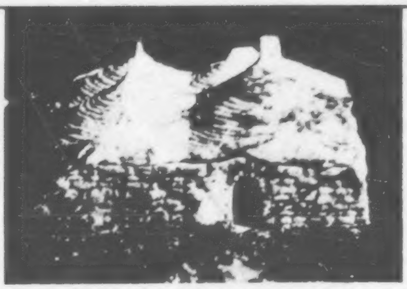
Softbound, packet includes catalog of essays and exhibit checklist

$3.50 for activity packet
$8.00 for catalog
$1.00 for checklist or free with catalog

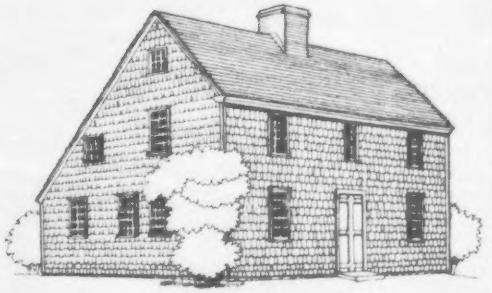
The Katonah Gallery
28 Bedford Rd.
Katonah, NY 10536

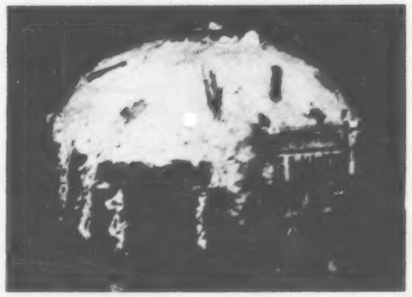
The Shelter packet is a first rate example of museum developed resources for the classroom.
Environmental education teacher

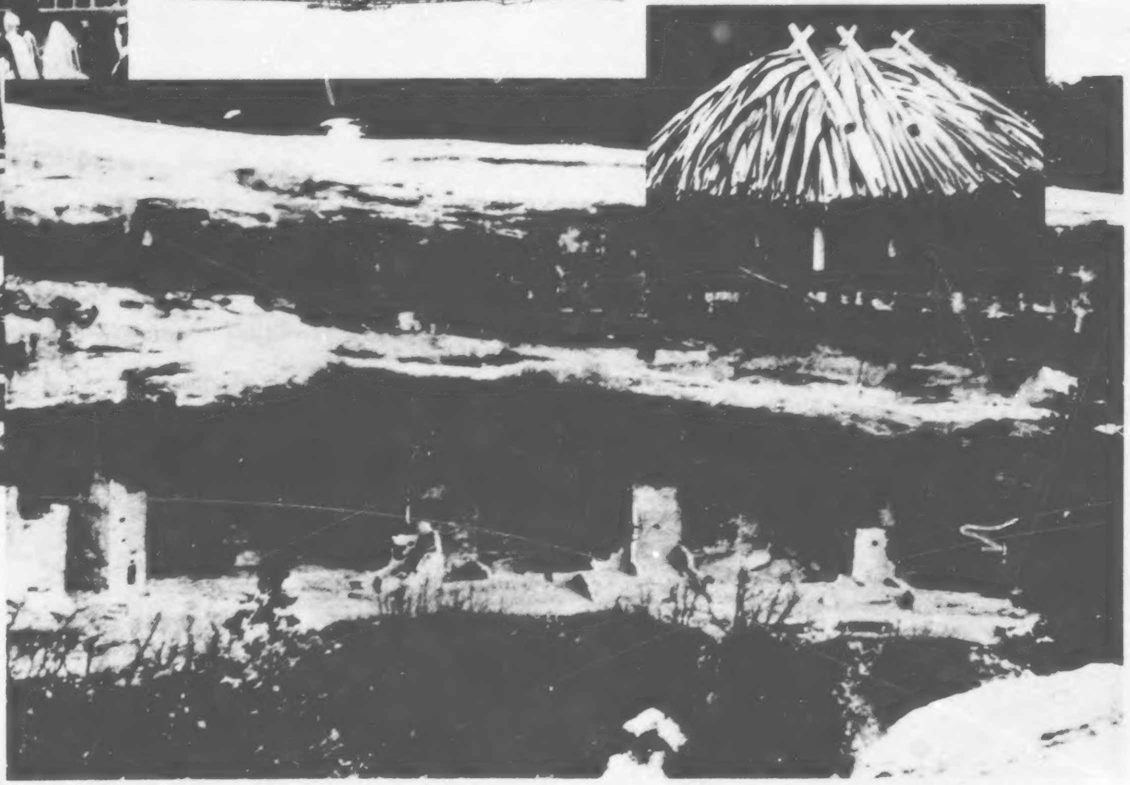


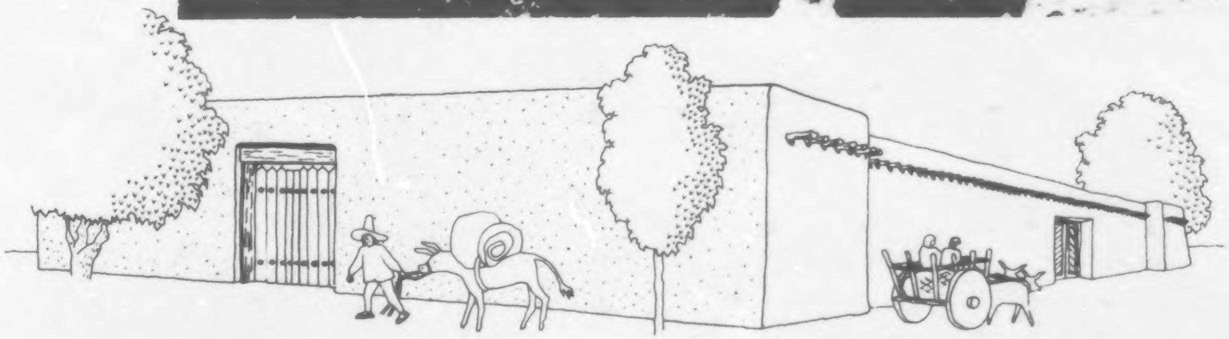


Traditional native dwellings and settlements—often referred to as vernacular architecture—are especially significant in today's energy-conscious world. Whether of wood, stone, mud, sod, reeds, or hides, these structures reflect the builder's understanding of local natural conditions, the suitability of available materials, and the physical and cultural needs of the dweller.









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Shelter is an activity packet that demonstrates the relationship of different housing types to climate, culture, and environment. Designed for upper elementary and middle school students, *Shelter* may be adapted for high school students with the additional catalog of essays, edited by James Marston Fitch, prepared for the original museum exhibit at the Katonah Gallery.

The *Shelter* materials illustrate native housing types in four different climate zones. These indigenous housing types are the practical solutions to local environmental resources and constraints. Not only are these housing models interesting from the viewpoints of design and anthropology, but they also represent some of the earliest examples of energy-conscious architecture.

The activity packet contains individual information and activity sheets that can be copied for each student with instructions, illustrations, and cut-outs. The activities range from experiments in temperature and air flow in igloos, to totem pole design, to models of African villages and contemporary solar designs.

The accompanying catalog of essays, written for an older audience, provides original, writings from foremost authorities in architecture, ecology, anthropology, and environmental psychology. These essays can be used for teacher background or for extensions with high school students.

The *Shelter* materials were developed in concert with the exhibition of the same name at the Katonah Gallery in New York state. An illustrated checklist of the exhibit of model habitats is also available.

GRADE LEVEL	
K-3	
4-6	●
7-8	●
9-12	
College-Adult	
SUBJECT AREA	
Art	●
Language Arts	
Math	
Science	
Social Studies	●
RESOURCE TYPE	
Teacher Guide	●
Student Resource	●
SETTING FOR USE	
Classroom	●
Studio	●
Lab	
School Grounds	
Field Trip	

Activities To Try

Why the Igloo?

The igloo is designed to take advantage of the way air moves. Here is an experiment in which you can actually see how warm air and cold air interact.

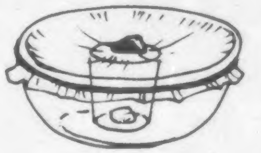
Materials: 2 glass jars, 1 sheet of paper matches, 1 small piece of rope (clothesline, not plastic), a friend to help you!

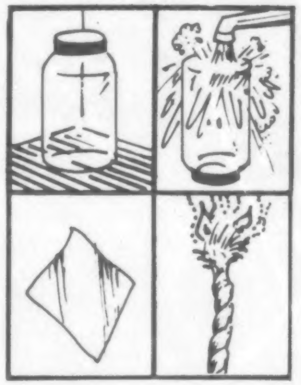
Procedure:

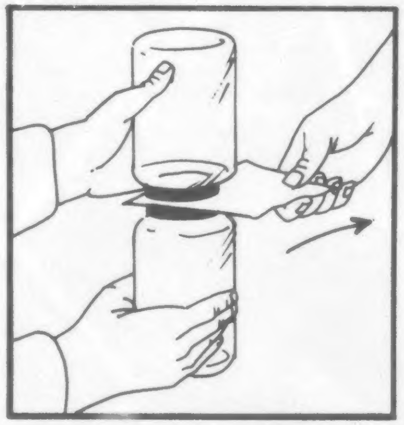
1. Chill one jar in the refrigerator for 2 to 3 minutes.
2. Heat the outside of the other jar with hot water.
3. Have a friend light the end of the rope. When it starts to smoke, place it in the cold jar for 5 to 10 seconds (cold air can be identified by the smoke). Do this with teacher or parent supervision.
4. Remove rope.
5. Cover top of cold jar with paper and place hot jar upside down over the cold jar.
6. Holding jars steady, and close together, have friend remove paper.
7. Holding jars together, turn them upside down. Now the warm air is on the bottom.
8. Wait a few minutes and see what happens. The warm air rises to the top as the smoky cold air gradually sinks to the bottom.

Now look at the diagram below. Which is the warmest section of the igloo?

As you saw in the experiment, warm air rises and takes the place of cool air which is forced to sink. In the igloo, as the cool air passes through the tunnel, it warms and rises to the highest level, the living area. Here an oil lamp burns day and night to provide further heat.







The Sun at Work

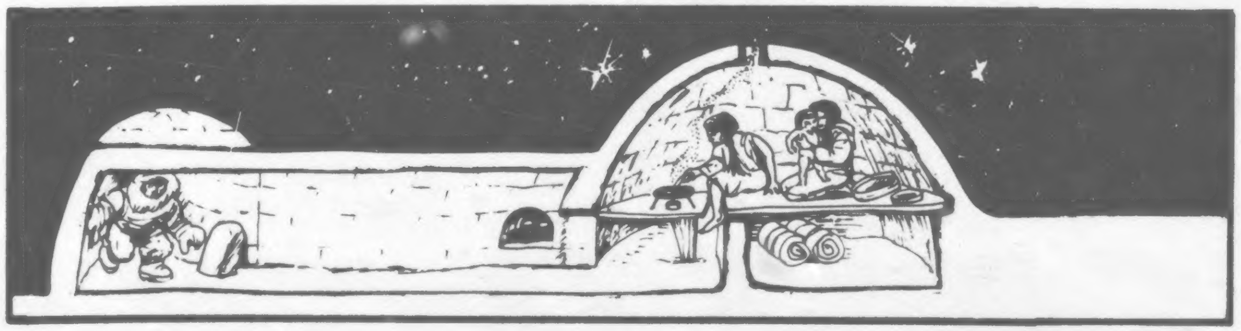
Energy from the sun creates our weather and provides us with fresh water. The sun heats the earth and draws moisture into the air through a process called evaporation. This moisture forms clouds in the sky. When the clouds cool, drops of moisture form and fall to the earth as rain. If you know how the sun produces water, you may be able to save your life someday.

Make Fresh Water Out of Salt Water

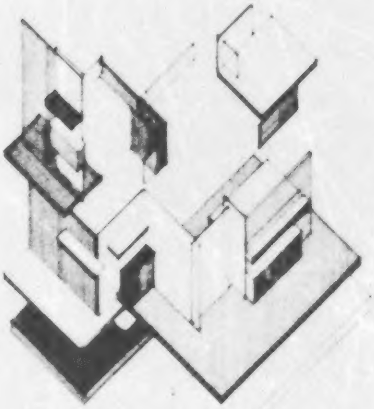
Materials: a bowl, a glass, 1 quart of water, 2 tablespoons of salt, 2 stones, plastic wrap, rubber band

Procedure:

1. Put water and salt in bowl.
2. Place stone in glass (to steady it) and place glass in bowl.
3. Cover bowl with plastic and fasten with rubber band.
4. Put small stone on plastic to make it sag over the glass.
5. Put bowl in hot sun and watch the drops form on the plastic and run into the glass.
6. Taste it!



Architecture: Form, Space & Order. Francis D.K. Ching, Van Nostrand Reinhold, New York, 1979.



A careful examination of the fundamental elements of architectural design. Ching analyzes the formal concepts behind the art of architecture: point, line, plane, and volume; the visual properties of form; the interaction of form and space; organization and circulation; proportion and scale; and the underlying ordering principles which vivify every structure. Presenting these elements of form as basic design tools, Ching demonstrates their use in historical and contemporary examples from around the world. Illustrated throughout, this text was written for architectural students but will find a wide readership among those interested in learning to look at buildings through the eyes of an architect.

Earthscape: A Manual of Environmental Planning. John Ormsbee Simonds, McGraw-Hill, New York, 1978.

A wealth of insights and illustrations of constructive paths toward environmental quality. Simonds, a landscape architect of national stature, lays out creative planning approaches to environmental concerns associated with our land, air, water, and human settlements. Drawing on the contributions of designers, planners, ecologists, and engineers as well as his own professional experiences, Simonds demonstrates the opportunities that exist for viable development and management of the natural landscape and the human environment. Illustrated throughout with sketches, maps, photographs, and line drawings, *Earthscape* provides concrete suggestions for individual and group actions by laypersons and professionals, exemplified through case studies and amplified by numerous quotations, references, and checklists.

"Conservation need not be static—the unreasoning and jealous safeguarding of the status quo. It is not inimical to either development or progress. Indeed, true progress can be attained only when development and conservation are carried forward hand in hand, when they are planned together, and are complementary."

Extinction: The Causes and Consequences of the Disappearance of Species, Paul and Anne Ehrlich, Random House, New York, 1981.

A critical exposition on the sources and solutions for worldwide extinction of species. *Extinction* is the latest work by the Ehrlichs, noted biologists at Stanford University and authors of numerous publications on ecology, population, and the environment. In this book, they convey the urgency of our progressive destruction of other species and plead for the development of a sustainable society committed to living within environmental constraints, practicing population control, nurturing sound economic development, and honoring diversity in nature. Readable and well documented, *Extinction* extends its readers' understanding of the myriad implications of species extinction for the future of life on Earth.

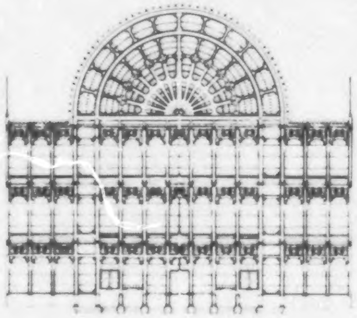
"The biosphere is being nickled-and-dimed to death: some overexploitation here, a little habitat destruction there, a bit more acid rain or PBC somewhere else. The enemy is not only 'us' but virtually all human activities. The crisis is terribly mundane, but terribly serious. Unless appropriate steps are taken soon to preserve Earth's plants, animals, and microorganiisms, humanity faces a catastrophe fully as serious as an all-out thermonuclear war."

The Gift of Good Land: Further Essays Cultural and Agricultural.
Wendell Berry, North Point Press, San Francisco, 1981.

A critical, provocative exploration of the integral interdependence of man and the land. Naturalist, teacher, social critic, and farmer, Berry extends the issues developed in *The Unsettling of America* and his other writings in this new volume of essays. Berry draws on his experiences on his own farm in Kentucky, his observations on contemporary farming practices, and his travels—to witness Peruvian agriculture, farming in the Southwest, Amish culture and cultivation. Twenty-four essays span topics of energy on the farm, homesteading, family work, scythes, and farm horses. Challenging the economics of large scale agribusiness, Berry advocates for a mutually nurturing relationship between the soil and its stewards.

"The small farm cannot be 'developed' like a product or a program. Like a household, it is a human organism, and it has its origins in both nature and culture. Its justification is not only agricultural, but is a part of an ancient pattern of values, aspirations, attitudes, faiths, knowledges, and skills that propose and support the sound establishment of a people on the land. To defend the small farm is to defend a large part, and the best part, of our cultural inheritance."

Great Architecture of the World: An Illustrated History from Stonehenge to the Twentieth Century, ed. John Julius Norwich, Bonanza Books, New York, 1979.



An extensively illustrated portrayal of the world's architectural legacies. Covering all continents of the globe across the history of built form, this reference work is an inspiring record of architectural styles and masterpieces. Researched and written by an impressive group of British architectural historians, this survey is dominated by some eight hundred illustrations in both color and black and white. In addition to the photographic representations there is an abundance of drawn reconstructions, sections and plans, isometrics and perspective cutaways. Not only is the beauty and variety of architectural styles documented, but the inner workings and structural integrity of these monuments to human creativity are revealed as well.

Life on Earth: A Natural History, David Attenborough, Little, Brown, Boston, 1979.

Natural history and the history of nature. *Life on Earth* compresses three billion years of natural evolution into three hundred pages of extraordinary color photographs and lucid prose, accessible to the general reader. Attenborough, a British zoologist and anthropologist, frames his examinations with intriguing firsthand field experiences and historical anecdotes from scientific discovery. Travelling around the world from jungle to barrier reef to ice cap, Attenborough brings his readers closer to the marvels of the animal kingdom, its relentless continuity and infinite variety. The text and its extraordinary illustrations were gleaned from the BBC television series of the same name.

"It is not difficult to discover an unknown animal. Spend a day in the tropical forest of South America, turning over logs, looking beneath bark, sifting through the moist litter of leaves, followed by an evening shining a mercury lamp on a white screen, and one way and another you will collect hundreds of different kinds of small creatures. Moths, caterpillars, spiders, long-nosed bugs, luminous beetles, harmless butterflies disguised as wasps, wasps shaped like ants, sticks that walk, leaves that open wings and fly—the variety will be enormous and one of these creatures will almost certainly be undescribed by science."

100 Short Films about the Human Environment, ed, William R. Ewald, ABC-Clio, Santa Barbara, CA, 1982.

Informative reviews of the best in environmental filming. *100 Short Films* is indexed by category: energy, environment (physical), economics/technology, education, and ethics. From 40,000 citations from the National Information Center for Educational Media and forty-five film catalogs, five hundred qualifying films were screened for final selection by a professional staff and three national panels of film librarians. The catalog of one hundred films that resulted from this process provides a definitive listing of two decades of exceptional environmental films. Each review provides critical and functional information, making this guide a welcome reference for anyone seeking another medium in environmental education resources.

"This collection deals with the natural and the man-built environment, and much more. It is especially concerned with demonstrating interconnections, as in ecology, but it is not limited to biology. The subject matter of this collection is environment, total environment (social, economic, physical, and cultural)."

The Next Whole Earth Catalog: Access to Tools, ed. Stewart Brand, Point, New York, Second Edition, 1981.

The latest edition of this inexhaustible resource, culminating ten years of cataloging success. *The Next Whole Earth Catalog* continues to inform and inspire its readers with an encyclopedic access to tools for self-sufficiency and environmental learning. Always more than a catalog, this popular guide embodies the energy and resources available to anyone who wants to make personal and community environments more productive and satisfying. Every page offers objective yet enthusiastic treatments of available books, tools, and supplies. Materials can be ordered directly through the Whole Earth Household Store, but the ideas that are at the root of this catalog are available immediately.

THEATRICAL PATTERN SERVICE

Patterns for Authentic Period Costumes

- Ancient to present periods
- Accessories to order (Masks wigs, armor)
- Consulting service Color design etc
- Workshops Design construction makeup masks creative dramatics

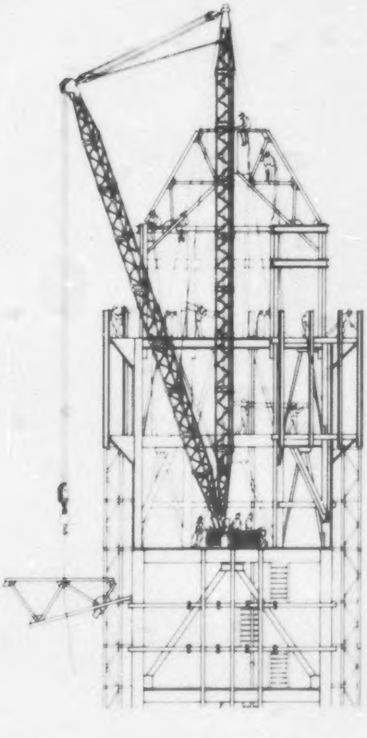
P O Box 2343
Grand Rapids MI 49501
616/456-9722

Progress for a Small Planet. Barbara Ward, W. W. Norton, New York, 1979.

Underscores the inevitable connections between the environment and development. International spokesperson for global cooperation in economic and environmental planning, Ward focuses here on sources of energy, materials, and food and the process of urbanization in developed and developing nations. The author urges international policies and national commitment to avert potential disasters. Through extensive research and a profound grasp of global issues, Ward advocates for fairness in economic distribution, alternative technologies to conserve and recycle resources, and responsible environmental management. *Progress for a Small Planet* is both an admonition and a declaration of hope.

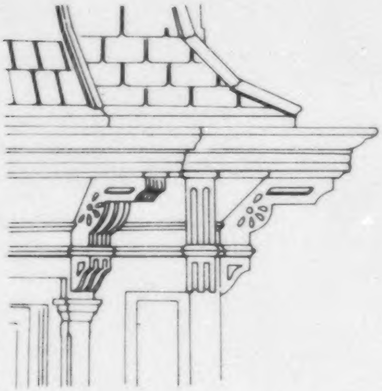
"Parts of the developing world are positively strewn with well-meant governmental or international efforts to upgrade settlements, to bring in power and water and set going an upward spiral of achievement. But nobody remembered to consult or involve the people. As a result, all the evidence of effort may be a broken pump or a contaminated well. The most basic of all basic needs turns out to be the right to participate in the adventure of change and to see the advantage of the work."

Unbuilding. David Macaulay, Houghton-Mifflin, Boston, 1980.



The most recent of David Macaulay's informal yet knowledgeable analyses of historic structures. Basing his tale on a most unlikely but humorous premise, the author dismantles the Empire State Building. Along the way, the reader learns of spandrel beams and pneumatic hammers, limestone facades and ornamentation. How a building is put together is described by taking one apart floor by floor, beam by beam. While meticulously dissecting the giant skyscraper, Macaulay conveys its indestructible spirit as well. Going up or coming down, the Empire State Building is reinforced as a unique American symbol. As with his other equally enlightening books, *Cathedral, City, Pyramid, Underground* and *Castle,* Macaulay uncovers the structure and fabrication of our human habitat through meticulous drawings and ingenious perspectives.

What Style Is It?, John Poppeliers, S. Allen Chambers, Nancy B. Schwartz, The Preservation Press, Washington, D.C., 1977.



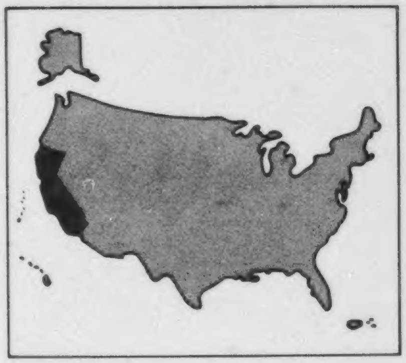
Concise, authoritative handbook on architectural styles in America. In less than fifty pages, this succinct guide organizes the evolution of domestic architecture into four major periods and documents each style through excellent photographs drawn from the Historic American Building Survey. Reliable descriptions and concrete examples help the novice get his bearings and learn to distinguish Georgian from Federal, Spanish Colonial from Prairie styles. The text and its illustrated glossary will quickly build a basic architectural vocabulary. *What Style Is It?* first appeared as a series of articles in *Historic Preservation*, the quarterly journal of the National Trust for Historic Preservation.

Why Buildings Stand Up: The Strength of Architecture, Mario Salvadori, W. W. Norton, New York, 1980.

DOME BEFORE LOADING
DOME AFTER LOADING
PARALLEL IN COMPRESSION
UNCHANGED PARALLEL
PARALLEL IN TENSION

A clear and engaging exposition on the principles of structural engineering and architectural technology. Salvadori, a professor of architecture and engineering at Columbia University and a professional consulting engineer, explains the fundamentals of structures and the building of architectural masterpieces. Equally at ease describing rotational equilibrium or the historical and philosophical implications of the construction of Hagia Sophia, Salvadori conveys a reverence for both the aesthetic and the technology of built form. Lucid and precise line drawings mirror the text in style and charm. Drawing on a lifetime of professional experience and research, Salvadori takes the mystery out of the monumental, tracing the adventurous building of the Eiffel Tower, the Brooklyn Bridge, unfinished cathedrals and irreducible domes.

California



AIA REGIONAL CONTACT:

Thomas B. Moon, AIA, President
Orange County Chapter
Thomas Moon & Associates
2234 Newport Blvd.
Newport Beach, CA 92663
(714) 673-0641

AIA Public Education Committee

STATE EE COORDINATOR:

Rudolph Schafer
EE Coordinator
California Department of Education
State Education Bldg.
721 Capitol Mall
Sacramento, CA 95814
(916) 323-2602

Coordinates staff development.

Operates a state grants program.

Developed a state EE curriculum framework based on total EE and values clarification.

Offers information, assistance and library resources.

Annual environmental merit award offered to outstanding student conservation projects.

AIA RESOURCE PEOPLE AND PROJECTS:

LONG BEACH
Maxine Towne, Executive Director
Cabrillo Chapter
121 Linden Ave.
Long Beach, CA 90802

SACRAMENTO
Paul W. Welch, Jr., Executive Vice President
California Council of AIA
1414 K St., Suite 320
Sacramento, CA 95814

SAN DIEGO
Donalee Deffenbach, Executive Director
San Diego Chapter
233 "A" St. #207
San Diego, CA 92101

LOCAL/REGIONAL RESOURCE CENTERS:

BERKELEY
Alan I. Kaplan
East Bay Regional Park District.
Tilden Nature Area
Berkeley, CA 94708

Conducts program on interpretation and accessibility for the disabled, which introduces other professionals and the public to techniques for making EE programs accessible to people with disabilities. Simulations of handicaps increase sensitivity to special needs.

A non lending-library of resource materials (books, journals, clippings) is maintained. Advice cheerfully given.

Will answer requests from anywhere for assistance.

Beverly Bense, Associate
The Ecology Center
2701 College Ave.
Berkeley, CA 94705

Conducts Eco-Kids Environmental Education program.

Developed an elementary school teaching guide, *First Steps in Ecology.*

BERKELEY
Dave Buller, OBIS Coordinator
Outdoor Biology Instructional Strategies
Lawrence Hall of Science
University of California
Berkeley, CA 94720

Comprehensive sets of outdoor education activities now available through commercial publisher.

Over ninety-five OBIS resource centers operating around the country.

Training workshops, films, newsletter available.

Chosen in 1981 as model program for *The Sourcebook*.

LOS ANGELES
Doreen G. Nelson, Director
Center for City Building Education Programs
2210 Wilshire Blvd.
Suite 303
Santa Monica, CA 90403

Interdisciplinary approach to education using the functions of a city as an educational strategy that spans all subject areas, grade levels, and traditional curriculum.

Offers consulting, training workshops, and materials such as *City Building Educational Manual,* training guidebooks, and films.

National service area. Currently training a corps of teachers in the ABC Unified School District of Cerritos, CA to train peers and to make model available to educators nationally.

SACRAMENTO
Mike Freed, President
Western Interpreters Association
P.O. Box 28366
Sacramento, CA 95828

Forum for information and ideas exchange between educators and interpreters.

EE emphasis on historical and cultural interpretations.

Publishes a quarterly journal, *The Interpreter,* national newsletter, and bimonthly newsletter.

Nine chapters cover most of the United States.

SAN FRANCISCO
Bill Hammerman, Professor of Education
San Francisco State University
1600 Holloway Ave.
San Francisco, CA 94132

Provides various EE resources to teachers and provides information on local EE programs. Maintains an EE library/instructional materials center for teachers.

Is familiar with activities and projects in EE (especially the built environment) for K-12, in addition to materials and teaching strategies.

SANTA CRUZ
Bill Leland, Executive Director
Harbinger Communications
50 Rustic Lane
Santa Cruz, CA 95060

Publishes annually the *Harbinger File* describing 565 citizen groups, government agencies, and EE programs concerned with environmental issues in the San Francisco Bay Area and other parts of northern and central California.

Also publishes an extensive inventory of EE activity and program resources in the area.

Serves central and northern California.

COMMUNITY RESOURCE PEOPLE:

DOWNEY
Jack Davidson
County Office of Education
9300 E. Imperial Hwy.
Downey, CA 90242

Consultant to L.A. Schools

Provides units or parts of various EE resources to teachers and serves local EE programs.

HAYWARD
Donald Lundstrom, Director
Curriculum and Instructional Support
Alameda County Office of Education
685 A St.
Hayward, CA 94541

Assists county EE programs, e.g. Marine Ecology Research (MER) projects, state EE guide, instructional planning, staff development, and workshops.

Available materials include MER teacher guides (5–12), state EE guide (K-12).

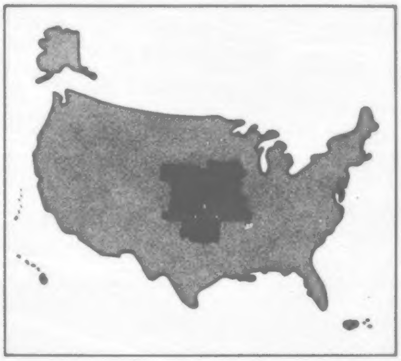
Serves Alameda County area.

HUMBOLDT
EE Program
Humboldt County Office of Education
Environmental Education Program
901 Myrtle Ave.
Eureka, CA 95501

The goal of the EE curriculum is to develop in students a respect for life, a sense of environmental responsibility, and the desire to work with other people to maintain a healthy environment.

The *Green Box* is a complete curriculum kit for teaching EE to K–8 grade students.

Central States



AIA REGIONAL CONTACT:

Vernon Reed, AIA
Reed Architects
15 W. 10th Street
Kansas City, MO 64105
(816) 421-0200

AIA Public Education Committee

STATE EE COORDINATORS:

IOWA
DES MOINES
Duane Toomsen
Iowa Department of Public Instruction
Grimes State Office Bldg. 50B
Des Moines, IO 50319
(515) 281-3264

KANSAS
TOPEKA
Clayton Stultz
Kansas State Department of Education
120 East 10th Street
Topeka, KS 66612
(913) 296-4935

MISSOURI
JEFFERSON CITY
Robert Taylor
Missouri State Department
of Education
Division of Public Schools
Jefferson Bldg. Box 480
Jefferson City, MO 65101
(314) 751-2625

Has developed a K-12 curriculum for all subject areas covering conservation, energy, and environmental education concepts and activities.

Distributes EE materials quarterly; includes a "Man and Environment" packet.

NEBRASKA
LINCOLN
Don Woodburn
Nebraska Department of Education
301 Centennial Mall South
Lincoln, NE 68509
(402) 471-2446

Environmental programs and materials including *Nebraska's Guide to Environmental Resources.*

OKLAHOMA
OKLAHOMA CITY
Larry McKinney
Oklahoma Department of Education
2500 North Lincoln Blvd.
Oklahoma City, OK 73015
(405) 521-3361

Conducts in-service workshops, develops EE materials and guides.

Operates Project SEEK, a computer search service for teachers.

Available materials include: *Conservation Handbook, Outdoor Education Guide,* among others.

AIA RESOURCE PEOPLE AND PROGRAMS:

IOWA
DES MOINES
Claudia R. Cackler, Executive Director
Iowa Chapter
512 Walnut
Des Moines, IO 50309

KANSAS
KANSAS CITY
Joseph J. Oshiver
1140 Adams
Cambridge Circle
Kansas City, KS 66103

Offers a program of tours compiled and written by him for school systems within Kansas City. Tours are to public buildings and private development.

Focus on the role of the architect within the community, within history, within construction team plus site development, effect of city codes, topography, weather conditions, artistic media, transportation, etc.

In addition to classroom visits and tours, literature from curators and regional studies are made available. Adaptable to different grade levels.

TOPEKA
Bill Curtis, Executive Director
Kansas Society of Architects
724 Kansas Ave.
Topeka, KS 66603

MISSOURI
KANSAS CITY
Linda Ervin Young, Executive Director
Kansas City Chapter
20 W. Ninth St.
Kansas City, MO 64105

ST. LOUIS
Betty Lou Custer, FAIA,
Executive Vice President
St. Louis Chapter
919 Olive St.
St. Louis, MO 63101

Very active chapter, conducts field trips, seminars, and teacher training programs.

Funds its own architect in area schools.

Susan Galloway
Educational Consultant
1122 Dunwoody Court
St. Louis, MO 63122

Works with teachers K-12 to coordinate school's curriculum with built environment resources.

Represents the Women's Architectural League on the St. Louis Chapter/AIA, Architectural Awareness in Schools Committee, and coordinates the volunteer participation of WAL members in built environment activities and programs.

Janet Rothberg White, AIA
7616 Carswold
St. Louis, MO 63105

AIA Public Education Committee

Directs and implements the Built Environment Education Program, "Space to Place," sponsored by The Educational Confederation. Students plan, design, and construct a selected project in their own school environment, using actual architectural design process as a formal means to develop their projects.

In-school program offers direct classroom contact.

Teacher training workshop: presents BEE concepts and identifies projects for schools to be implemented by the teachers.

Serves St. Louis metropolitan area; city and county, public and private schools, grades K-12.

NEBRASKA
OMAHA
Jean Gardiner Muntz,
Executive Secretary
Nebraska Society of Architects
1910 S. 44th St.
Omaha, NE 68105

OKLAHOMA
OKLAHOMA CITY
Mabel Krank, Hon. AIA,
Executive Secretary
Oklahoma Council of Architects
405 NW 15th St.
Oklahoma City, OK 73103

LOCAL/REGIONAL RESOURCE CENTERS:

KANSAS
MANHATTAN
Dr. Robert James
Dr. Terry Shaw
College of Education
Kansas State University
251/237 Bluemont Hall
Manhattan, KS 66506

Provides training for teachers in EE through regular courses, workshops, and programs funded by the National Science Foundation, US Department of Energy, and the Kansas Energy Office.

Offers workshop presentations, consulting, and course offerings for many areas of EE including energy education, OBIS, water management education (using the Water Resources Management Simulator), developing outdoor classroom sites, etc. Library has a very large selection of materials, games, and films in EE.

Serves the state of Kansas with northeastern concentration.

OKLAHOMA
ADA
Don Kellogg, Professor of
Science Education
East Central University
Ada, OK 74820

Teaches conservation education leadership training and energy education seminars that provide concepts and curriculum for teachers.

Provides consulting services in curricular information as well; outdoor classroom facilities available.

Serves southeastern quarter of Oklahoma.

STILLWATER
Terrence J. Mills, Director
Natural Resources and Environmental
Education Center
302 Gundersen
College of Education
Department of Curriculum and
Instruction
Oklahoma State University
Stillwater, OK 74074

Has developed curriculum in areas of solid waste disposal and recycling, water resources, energy resource education.

Offers several teacher training programs which emphasize multidisciplinary and holistic approaches to EE.

TULSA
Eileen Docekal, Naturalist
Oxley Nature Center
Tulsa, OK 74103

EE program consists of interpretive walks led by naturalists and volunteer nature guides for the Tulsa Public Schools as well as for the general public. Emphasis is on exploration and discovery of the aquatic and forest communities in the 800-acre preserve.

Interpretive building with displays, library, and classrooms, eight miles of trails, an open-air shelter, and trails accessible for blind and wheelchair-bound individuals.

Located in Mohawk Park in Tulsa.

COMMUNITY RESOURCE PEOPLE:

KANSAS
SHAWNEE MISSION
Ginney Graves
5328 W. 67
Shawnee Mission, KS 66208

Creative educational consultation providing workshops for teachers and others working with youth in this area. Emphasis is on architectural preservation. Hands-on approach.

Serving Midwest primarily.

TOPEKA

C. L. Kellogg
Barbara Stanley
Topeka Public Schools USD 501
125 SE 27th St.
Topeka, KS 66605

Conduct the Topeka Outdoor EE Program, a sequential 1-12 grade effort.

Available materials include program description, 1-12 grade curriculum material.

Facilitate a variety of EE workshops in Topeka (15,000 students) and in region (e.g. OEE workshops).

NEBRASKA

BELLEVIEW

Steve McCaw
Project Plum
700 Camp Gifford Rd.
Belleview, NE 68005

A comprehensive 7-12 grade program on land-use, includes teacher guide, student booklet, audiovisual material, and worksheets.

OMAHA

Craig K. Fullerton
Omaha Public Schools
3902 Davenport St.
Omaha, NE 68131

As Assistant Superintendent of Instruction has incorporated EE into area schools.

Grades 6 and 8 involved in outdoor education program; 9th grade geography class has adopted "Geography in an Urban Age" curriculum; industrial education classes stress design and construction.

OKLAHOMA

HOLDENVILLE

Jane Kellogg
Holdenville Public Schools
PO Box 977
Holdenville, OK 74848

Hand in Hand, an EE project for 3-6 grades, community oriented and hands-on approach.

Has curriculum guides available.

Operates within the local school system.

MOORE

Jimmie Pigg
Moore Public Schools
300 N. Edsten
Moore, OK 73160

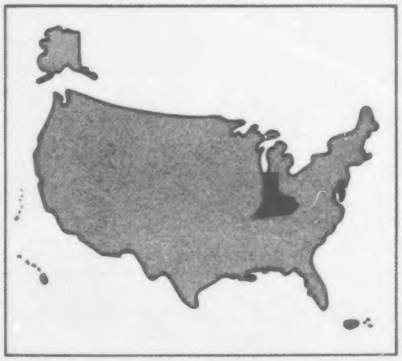
Outdoor school for 3rd and 5th grades and project research for 7-12; Science Mobile for EE.

As science coordinator, directs outdoor education at all levels; complete program for K-6 grades. Project research is a field research program covering most of state.

Has lesson plans and grade level activities sheets for teachers and science mobile.

Site for outdoor school is on 12,000 acres at Lexington.

Eastern Central States



AIA REGIONAL CONTACT:

Kenneth A. Englund, Executive Director
Indiana Society of Architects
148 N. Delaware St.
Indianapolis, IN 46204
(606) 255-7435

STATE EE COORDINATORS:

INDIANA
INDIANAPOLIS
Joe Wright
Indiana Department of Public Instruction
Room 229 State House
Indianapolis, IN 46204
(317) 927-0111

Offers consulting services to local education agencies (LEA) with in-service training, curriculum development, and evaluation.

State Environmental Education Guideline K-12 and a state energy education curriculum are available.

Dissemination of materials throughout Indiana.

Total EE program (won NAEE award) involves over 25,000 teachers in state.

KENTUCKY
FRANKFORT
Nancy Stearns Theiss
Kentucky Department of Education
Rm 1829
Capital Plaza Tower
Frankfort, KY 40601
(502) 564-2672

Coordinates, initiates, and helps maintain EE programs for KY schools.

Offers consulting services and workshop facilitation.

Available materials include: *Energy Conservation Activities for the Classroom, Building Outdoor Classrooms; KAEER Fair Resource Guide; KY Energy Education Program (KEEP) K-6 and 7-12; Natural Heritage Handbook* with videotape, "Thunder at Middle Ground"; 1982 revised Guidelines for EE; *The Kentucky Plan: Bring the Outdoors to Your Classroom.*

AIA RESOURCE PEOPLE AND PROGRAMS:

INDIANA
MUNCIE
Uwe F. Koehler
Professor of Architecture
Ball State University
College of Architecture and Planning
Muncie, IN 47306

AIA Public Education Committee

KENTUCKY
LEXINGTON
Darryl R. Callahan, Executive Director
Kentucky Society of Architects
120 Kentucky Ave.
Lexington, KY 40502

LOCAL/REGIONAL RESOURCE CENTERS:

INDIANA
NOTRE DAME
Patrick Horsbrugh, Director
Environic Foundation International
P.O. Box 88
Notre Dame, IN 46556

Research and development conducted on Environic Design concepts; involves the use of ecological disciplines in structural design.

COMMUNITY RESOURCE PEOPLE:

INDIANA
FORT WAYNE
James R. Manak
Homestead High School
4310 Homestead Rd.
Fort Wayne, IN 46804

Environmental Science teacher at 10-12 grade level; involved in EE for several years.

Sponsors environmental trips to the Rockies and Canada and maintains an environmental science area on school property.

Makes multimedia presentations.

KENTUCKY

ANCHORAGE

Kenny Karem
124 Franck Ave.
Louisville, KY 40206

Social Studies, English and EE teacher in middle school and junior high.

Runs multidisciplinary field trips for all grades to the Falls of the Ohio, a proposed national monument (fossil reef, dams, Portland canal, historic railroad bridge, wildlife habitats, etc.).

Several pamphlets available: Geology of the Falls of the Ohio (U.S. Geological Survey), *A Journey to the Falls,* Clay Baird, McAlpine Locks (Army Corps of Engineers).

LEXINGTON

Anne E. Cassidy
Outdoor Education for the
Handicapped Project
110 Maxwelton Court
University of Kentucky
Lexington, KY 40506

Designed to assist educators, park and resource management personnel, and parents with developing and implementing outdoor education programs for all handicapped children and youth.

Has resources on outdoor education for all individuals, workshops, and referrals.

Serves Kentucky, Ohio, Indiana, and Tennessee.

Don Martin
Appalachia Science in the Public
Interest
180 Market St.
Lexington, KY 40507

Florida/Caribbean

AIA REGIONAL CONTACT:

John E. Stefany, FAIA
McElvy, Jennewein, Stefany and Howard
102 W. Whiting St.
Suite 502
Tampa, FL 33602
(813) 228-7721

AIA Public Education Committee

STATE EE COORDINATOR:

Richard Tillis
Office of Environmental Education
Florida Department of Education
W. V. Knott Bldg.
Tallahassee, FL 32312
(904) 488-6547

The built environment has been recent focus.

Mini-grants for over 1000 EE programs through state office.

AIA RESOURCE PEOPLE AND PROGRAMS:

FLORIDA
GAINESVILLE
John M. McRae, AIA
Associate Dean
Department of Architecture
University of Florida
Gainesville, FL 32611

AIA Public Education Committee

Has developed a teacher guide and student workbook called *Symbiosis 3—Man and His Need for Shelter,* used in several local elementary schools.

TALLAHASSEE
George A. Allen, Executive Vice President
Florida Association of Architects
P.O. Box 10388
117 W. College
Tallahassee, FL 32302

TAMPA
David W. Lawson, AIA
Lawson/Wedding Architects
4112 Cypress St.
Tampa, FL 33609

AIA Public Education Committee

Classroom teaching/artists-in-schools program. Three architects teach 8 hr/wk for 30 weeks—state mini-grant. Individual projects.

Has project program examples and slides of classroom presentations available.

Serves Hillsborough County.

PUERTO RICO
HATO REY
Jorge Rigau, Executive Director
Puerto Rico Chapter
PO Box 2299
Hato Rey, PR 00919

VIRGIN ISLANDS
ST. THOMAS
Donna Dejongh, AIA, President
Virgin Islands Chapter
P.O. Box 156
St. Thomas, VI 00801

LOCAL/REGIONAL RESOURCE CENTERS:

FLORIDA
FT. MYERS
William Hammond, Director
Lee County Environmental Education Center
5456 Parker Dr.
Ft. Myers, FL 33902

Provides support for district EE programs through publications, field trip program, media programs, teacher training and technical assistance, as well as coordinating district curriculum improvement of instructional materials.

Has slide programs, field trip units on human design/natural systems, technical assistance, curriculum models, and instructional materials.

Serves Lee County; also state and national involvement.

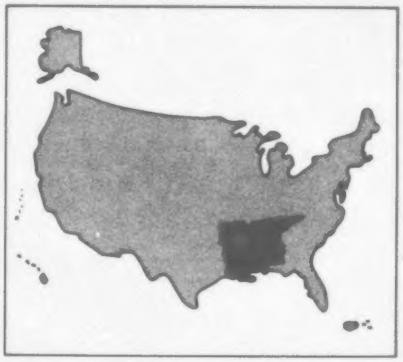
JACKSONVILLE

Richard Sykes, Science Curator
Jacksonville Museum of Arts and Sciences
1025 Gulf Life Dr.
Jacksonville, FL 32207

Provides teacher workshops on "The City Is . . ." and "Getting Around in the City."

Conducts fourth and sixth grade program on city tours.

Gulf States



AIA REGIONAL CONTACT:

Carl F. Burmeister, Jr. AIA
P.O. Box 9059
Mobile, AL 36609
(205) 343-0120

AIA Public Education Committee

STATE EE COORDINATORS:

ALABAMA
MONTGOMERY
Donna Bentley
Alabama Department of Education
Basic Science Section
111 Coliseum Blvd.
Montgomery, AL 36109
(205) 832-5850

Provides EE information and training, focus on outdoor and energy education.

ARKANSAS
LITTLE ROCK
Bill Fulton
Office of Economic, Energy and Environmental Education
Arkansas Department of Education
Capitol Mall
Bldg. 404B
Little Rock, AR 72201
(501) 371-2791

Disseminates energy and EE information and conducts workshops and develops curriculum.

Arkansas Energy Curriculum and the *Built Environment of Arkansas. Urban Score* available also.

LOUISIANA
BATON ROUGE
Don McGehee
Louisiana Department of Education
Box 44064
Baton Rouge, LA 70804
(504) 342-3420

Disseminates EE information from various resource agencies, conducts workshops, and develops curriculum.

MISSISSIPPI
JACKSON
Michael Carothers
Mississippi Department of Education
Division of Instruction
Box 771
Jackson, MS 39205
(601) 354-6955

TENNESSEE
COOKEVILLE
John Bennett
Tennessee Department of Education
P.O. Box 5077
Tennessee Tech
Cookeville, TN 38501
(615) 528-5431

In 1980 EE along with science and conservation education were integrated into 1-8 grade curriculum and developed as separate courses in 9-12 grades.

EE resource guide with activities is available along with in-service training.

NASHVILLE
Dr. Padgett Kelly, Director
Conservation Education
Tennessee Department of Education
104 Cordell Hull Bldg.
Nashville, TN 37219

Conservation Education Program is a K-12 program to teach an awareness of natural resource conservation.

Offers teacher in-service training sessions, residential workshops, and assistance in developing local materials and curriculum.

Serves throughout state.

AIA RESOURCE PEOPLE AND PROGRAMS:

ALABAMA
MONTGOMERY
Jay C. Leavell, Hon. AIA, Executive Secretary
Alabama Council of Architects
P.O. Box 237
Montgomery, AL 36101

Produced A-V slide shows on Alabama architecture, including: "150 Years of Architecture in AL," "Religious Architecture in AL," "Industrial Architecture in AL," "Railroad Architecture in AL." Available on loan from the Alabama Historical Commission, 725 Monroe St., Montgomery, AL 36130.

ARKANSAS
LITTLE ROCK
George Wildgen, Hon. AIA,
Executive Director
Arkansas Chapter
P.O. Box 2233
Little Rock, AR 72203

LOUISIANA
BATON ROUGE
Dick Thevenot, Hon. AIA,
Executive Director
Louisiana Architects Association
820 N St.
Baton Rouge, LA 70802

MISSISSIPPI
JACKSON
Kathy C. Jackson, Executive Secretary
Mississippi Chapter
P.O. Box 12515
Jackson, MS 39211

TENNESSEE
NASHVILLE
Connie W. Hoffman, Executive Director
Tennessee Society of Architects
223½ Sixth Ave., No.
Nashville, TN 37219

LOCAL/REGIONAL RESOURCE CENTERS:

LOUISIANA
BENTON
Jim Robbins, Director
Bossier Environmental Education
Center
Linton Rd.
Benton, LA 71006

An environmental study center for the Bossier Parish School System.

Provides in-service training and materials on request to teachers, including two curricula: *A Learning/Teaching Experience in Ecology* for 5th and 7th grade students.

The site is 100 acres of woodland.

SHREVEPORT
J. Ashley Sibley, Jr., Director
Grindstone Bluff Museum and
Environmental Education Center
PO Box 7965
Shreveport, LA 71107

Maintains the museum exhibits, research projects, nature trail resources, and library reference material.

TENNESSEE
KNOXVILLE
Environment Center
University of Tennessee
South Stadium Hall
Knoxville, TN 37916

Develops many material resources on energy and EE education.

MEMPHIS
Ron W. Cleminson, Director
Jill J. Norvell, Coordinator
Center for Environment and
Energy Education
College of Education
Dept. of Curriculum and Instruction
Memphis State University
Memphis, TN 38152

Teaching, service, research center for area educators.

EE and energy education resource library maintained that houses curricular materials, periodicals, texts, facts, and statistics.

Serves as a clearinghouse for area groups from schools, civic clubs, government agencies, business, and industry.

Serves Tennessee and surrounding states.

MURFREESBORO
Dr. Jack K. Carlton, Director
Environmental Education Center
Middle Tennessee State University
Box 512
Murfreesboro, TN 37132

Resource and service center for area schools and civic organizations.

In-service training and materials production for teachers, presentations, and demonstrations for civic clubs.

OAK RIDGE
Philip Johnson, Director
Oak Ridge Associated Universities
PO Box 117
Oak Ridge, TN 37830

Offers energy mini-courses on various energy topics, designed for teachers to use as units or integrated into their own curriculum.

COMMUNITY RESOURCE PEOPLE:

ALABAMA
TUSCALOOSA
John Sheffield
Tuscaloosa County High School
1304 17th Avenue
Tuscaloosa, AL 35401

Elementary school EE teacher

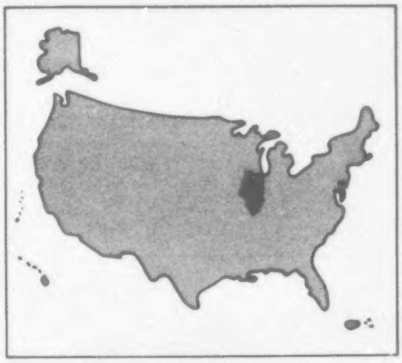
Teaches summer course at University of Alabama Museum of Natural History, where 3–6 graders learn about nature through outdoor activities and field trips.

LOUISIANA
ST. MARTINVILLE
Isadore Inman
St. Martin Parish Schools
305 Washington St.
St. Martinville, LA 70582

Supervisor EE program

Teaches K-12, outdoor activities, nature trail in the parish; has environmental curriculum guides and offers EE workshops to teachers.

Illinois



AIA REGIONAL CONTACT:

Gary L. Olsen , AIA
Olsen-Lytle Architects
315 South State
Champaign, IL 61820
(217) 359-3453

AIA Public Education Committee

STATE EE COORDINATOR:

Don Roderick
Illinois Office of Education
100 North First St.
Springfield, IL 62777
(217) 782-0360

1957 legislation requiring EE be taught in all public schools.

Each school district has an EE coordinator.

Energy/environmental computer simulator available—NORCUS.

AIA RESOURCE PEOPLE AND PROGRAMS:

CHAMPAIGN
Gary L. Olsen, AIA
Olsen-Lytle Architects
315 South State
Champaign, IL 61820
(217) 359-3453

Recently developed an award-winning curriculum, *Historic Preservation Education.*

Nonprofit corporation established to promote awareness of and appreciation for the arts and humanities primarily focusing on architecture and the built environment.

Development of educational materials for use with children and adults, consulting services, research related to EE and seminars and workshops in environmental and aesthetic education.

Serving sites in central Illinois and throughout Midwest.

SPRINGFIELD
Shirley J. Novell, Executive Director
Illinois Council of Architects
520 S. Second, Suite 802
Springfield, IL 62701

LOCAL/REGIONAL RESOURCE CENTERS:

CHARLESTON
Dr. Don Rogers, Professor EE
Eastern Illinois University
Charleston, IL 61920

CHICAGO
Morton Weisman, Director
Chicago Architecture Foundation
1800 South Prairie Ave.
Chicago, IL 60616

Program developed between Chicago Architecture Program and Chicago city schools for gifted high school students in awareness of architecture and the built environment.

Architectural bookstore at Archicenter; a gallery and lecture space for adult programs, also available to students; Glessner House, 1887, and Clarke House, 1836, as historic house learning laboratories (all owned by the foundation) as well as the architecture of Chicago's Loop.

OREGON
Clifford E. Knapp
Northern Illinois University
Lorado Taft Field Campus
Oregon, IL 61061

Consultant for outdoor/EE curriculum for camps, schools, or other organizations. Recently published *Humanizing Environmental Education.* Extensive course offerings at university for undergraduate and graduate levels. A resident facility is available for conferences frequently sponsored on outdoor education and EE.

Serves the northern Illinois area mainly, but contract courses and consultant services available on international basis.

URBANA

G. Day Ding, Professor
Walter H. Lewis, Professor
Department of Architecture
University of Illinois—Urbana
Urbana, IL 61801

Have developed a curriculum about "People Learning About Their Environments."

Ruth Wene
Anita Purves Nature Center
1501 N. Broadway
Urbana, IL 61801

Outdoor/EE program for area schools. Educational and recreation programs for public.

WARRENVILLE

Steve Van Matre
Acclimatization Experiences Institute
P.O. Box 238
Warrenville, IL 60555

Offers workshops and training programs and has several books and materials available, including: *Acclimatization, Acclimatizing, Sunship Earth,* and general materials and services.

Associate representatives in U.S., Canada, United Kingdom, and Australia.

COMMUNITY RESOURCE PEOPLE:

CHAMPAIGN

Dan McCollum
713 Arlington Court
Champaign, IL 61820

EE teacher for several years; has compiled classroom and community experiences into *Your Life and Mine—Problems and Projects in Conservation for Jr. High and Middle Schools.*

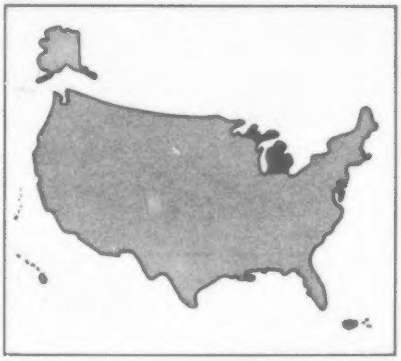
Nancy Roucher
Educational Concepts Group
315 S. State St.
Champaign, IL 61820

Provides a variety of workshops and training sessions for teachers and students as well as materials developed to suit specific needs, e.g. built environment and aesthetics.

Group and individual presentations, curriculum materials—manuals, tapes, slides—consultation, program development, and evaluation.

Serves Macon and Champaign counties; primary audience in Midwest but available for travel.

Michigan



AIA REGIONAL CONTACT:

Ann Stacy, Hon. AIA
Executive Director
Michigan Society of Architects
553 E. Jefferson
Detroit, MI 48226
(313) 965-4100

STATE EE COORDINATOR:

Jack Kammeraad
Michigan Department of Education
P.O. Box 30008
Lansing, MI 48909
(517) 373-1484

EE guidelines established in 1971 and DOE responsibilities assigned in 1980 Act.

Coordinates state activities, workshops, materials distribution, etc.

LOCAL/REGIONAL RESOURCE CENTERS:

BIRMINGHAM
Virginia Finny
Birmingham Schools Environmental Center
23400 West 13 Mile Rd.
Birmingham, MI 48010

Center provides an outdoor classroom on 10 acres for environmental studies K-12. Participates in a required part of the elementary science program.

Materials available include: *Handbook for Environmental Activities.* Field trips and special programs conducted upon request.

BLOOMFIELD HILLS
Jack Williamson, Program Director
Design Michigan
Education Project
Cranbrook Academy of Art
Box 801
500 Lone Pine Rd.
Bloomfield Hills, MI 48103

Longstanding program in EE includes Design Michigan Project; posters, curriculum guides, pamphlets available; workshops and conferences. Chosen in 1982 as model program for *The Sourcebook.*

EAST LANSING
Dr. Martin T. Hetherington
College of Education
Teaching Center
Michigan State University
324 Erickson Hall
East Lansing, MI 48824

Project Director for Regional Environmental Planning Project. Has developed a teaching guide and supplemental materials.

KALAMAZOO
Dr. Phillip T. Larsen, Director
Science and Math Education Center
Western Michigan University
B-302 Ellsworth Hall
Kalamazoo, MI 49008

The center serves as a resources and training center for a variety of EE projects. Also Outdoor Education and Nature Center materials and facilities are constructed.

Regional training and resource center for OBIS, PLT, HAP, SELPH.

Southern Michigan and northern Indiana service area.

COMMUNITY RESOURCE PEOPLE:

SOUTH LYON
David J. Larwa
Sayre Elementary School
23000 Valerie
South Lyon, MI 48178

Elementary science teacher involved with EE for past several years, particularly associated in facilities planning and EE school sites.

Site plan booklet available, *Changing Your School Site.*

Middle Atlantic States

AIA REGIONAL CONTACT:

Ted Kvell, AIA
Kvell-Corcoran Architects
2311 Calvert St. NW
Washington, DC 20008
(202) 462-3668

AIA Public Education Committee

STATE EE COORDINATORS:

DELAWARE
DOVER
John Cairns
Delaware Department
of Public Instruction
John G. Townsend Bldg.
Dover, DE 19901
(302) 678-4885

Dissemination of materials and in-service training (workshops in environmental structures, first offered Spring '80).

DISTRICT OF COLUMBIA
Mary Harbeck
CBC Center
Longdon Elementary School
20th and Evarts St. NE
Washington, DC 20018
(202) 576-6580

Supervising director for science in district.

MARYLAND
BALTIMORE
James Latham
Maryland Department of Education
P.O. Box 8717
BWI Airport
Baltimore, MD 21240
(301) 796-8300

Materials development and in-service training in EE.

Maryland Approach to EE Includes scientific, technological, social, and aesthetic dimensions.

VIRGINIA
RICHMOND
Teresa Myer Auldridge
State Department of Education
Box 6Q
Richmond, VA 23216
(804) 786-2676

Science Education Service

Directs statewide K-12 science program with responsibilities in the area of environment and energy education.

Provides consultant services and publications.

WEST VIRGINIA
CHARLESTON
Robert Seymour
West Virginia Department of Education
Capitol Complex
Rm B-330, Bldg 6
Charleston, WV 25305
(304) 348-7805

Provides in-service training and consultation.

Focuses on EE, energy, and technology.

AIA RESOURCE PEOPLE AND PROGRAMS:

DISTRICT OF COLUMBIA
Jane Dougherty, Hon. AIA
Executive Secretary
Washington Metropolitan Chapter
1777 Church St., NW
Washington, DC 20036

MARYLAND
BETHESDA
Ronald S. Ryner, Executive Director
Maryland Society of Architects
4948 St. Elmo Ave.
Bethesda, MD 20014

VIRGINIA
RESTON
Wayne L. Hughes, AIA
Hughes Group Architects
11484 Washington Plaza
Reston, VA 22090

RICHMOND
Thomas L. Osborne, Executive Director
Virginia Society of Architects
15 S. Fifth St.
Richmond, VA 23219

WEST VIRGINIA
CHARLESTON
Roberta J. Guffey, Executive Secretary
West Virginia Society of Architects
165 Lake Shore Dr.
Charleston, WV 25313

LOCAL/REGIONAL RESOURCE CENTERS:

DISTRICT OF COLUMBIA

(Ed.'s note: Many D.C. resource centers and organizations are presented in the section on national resources.)

Ann W. Lewin, Executive Director
Capital Children's Museum
800 3rd St. NE
Washington, DC 20002

Provides a model for the use of space to create environments that can be imaginative, realistic, flexible, etc. as a setting for different educational experiences.

MARYLAND
ANNAPOLIS

Karin E. Peterson, Director of Interpretation
Historic Annapolis, Inc.
18 Pinkney St.
Annapolis, MD 21401

Provides pre-tour presentation to introduce students to the evolution of local architecture.

Offers 3D models and slides for all grade levels, coordinated with a walking tour which uses the town and its buildings as a vehicle for learning history.

VIRGINIA
MILLWOOD

R. C. Plater, Jr., Manager
Burwell-Morgan Mill
Clark County Historical Association
Millwood, VA 22646

1782 grist mill in working condition produces corn meal and wheat flour. Spillway, hoists, historic stone building.

NEWPORT NEWS

John Burnham, Director of Education
Peninsula Nature and Science Center
524 J. Clyde Morris Blvd.
Newport News, VA 23601

Some exhibits dealing with colonial buildings and uses of buildings for homes, agriculture, and industries.

RICHMOND

R. Wesley Batten, Director
Mathematics and Science Center
2401 Hartman Street
Richmond, VA 23223

Programs in science and math for K-12 in-service education for teachers, extensive computer network to support school computer literacy programs, Saturday and summer classes, and programs for academically gifted.

Public access to Spider Museum and metro Aquarium Library of resource materials for research and curriculum development.

Curriculum materials supplied to area teachers to support lessons.

Serves public schools in Chesterfield, Goochland, and Henrico counties, and city of Richmond, plus affiliated private schools.

ROANOKE

Bernice Smith, Education Coordinator
Roanoke Valley Science Museum
2323 Overlook Rd. NE
Roanoke, VA 24012

Ecology exhibit on life zones of Virginia and terrestial and marine communities.

Audiovisual presentations on ecological topics, on request.

Conducts workshops for citizens, teachers, and students in outdoor activities, off-site.

Museum exhibits, ample outdoor areas to study, staff educators trained in environmental sciences.

COMMUNITY RESOURCE PEOPLE:

DELAWARE
WILMINGTON

Lillian Balick
Nancy Ebert
Delaware State Arts Council
State Office Bldg. 820 N. French St.
Wilmington, DE 19801

Coordinator of the Artists-in-Education program for the state.

DISTRICT OF COLUMBIA

Howard White
Capitol Page School
Library of Congress
Washington, DC 20540

Conducts a high school course, "Science and Social Issues," covering environmental and energy concerns.

MARYLAND
BALTIMORE

Steven Alpern
Barclay Elementary School
2900 Barclay St.
Baltimore, MD 21218

Involved in the GATE program for gifted and talented 1-6 graders on math and sciences.

Is a consultant to teachers in EE in the Baltimore City Schools.

VIRGINIA
ARLINGTON

Kitty Porterfield, Coordinator
Humanities Project
Arlington County Elementary Schools
300 N. Park Drive
Arlington, VA 22203

Provides arts performances and workshops to students in the Arlington Public Schools, involving both students and teachers in regular exchange with community artists by funding programs in every Arlington school each year.

FALMOUTH

Jon Slocum
Stafford County Schools
P.O. Box 5099
Rt. 627 and Cranes Corner
Falmouth, VA 22401

Director of project AIMIE, a program on energy and energy conservation which includes multidisciplinary mini-units, staff development activities, community involvement, student research and design projects.

ORANGE

Pam R. Moran
Orange Schools
P.O. Box 349
Orange, VA 22960

Project Director of COMSEP, Comprehensive School Ecology Project, an interdisciplinary approach to EE with emphasis on the acquisition of the knowledge, skills, and attitudes important to understanding and appreciation of the environment.

EE curricula materials available on topics, such as energy, overpopulation, and constructing environmental interpretive areas.

Serves K-12 students in Orange County Public Schools. Consultation available.

WEST VIRGINIA
LOOKOUT

Mary Jo Davison
Nuttall Middle School
Lookout, WV 25868

Middle school science teacher, specialist in use of outdoor classrooms, environmental clubs/projects, and in-service training of teachers in EE.

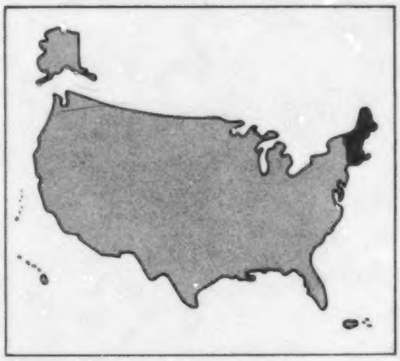
WEST UNION
Richard H. Beck
Doddridge County Schools
Office of the Superintendent
West Union, WV 26455

Outdoor education specialist for county, in nature study, camping activities, and EE.

Is familiar with EE programs and materials.

Works with K-8 students in county.

New England



AIA REGIONAL CONTACT:

Kenneth J Filarski, AIA
43 Page Street
Providence, RI 02903
(401) 861-2030

AIA Public Education Committee

STATE EE COORDINATORS:

CONNECTICUT
HARTFORD
Sigmund Abeles
State Department of Education
P.O. Box 2219
Hartford, CT 06115
(203) 566-4825

EE Program dissemination and in-service training.

Current emphasis on energy education.

MAINE
FARMINGTON
Dean Bennett
Franklin Hall
University of Maine at Farmington
Farmington, ME 04938

Has a state EE plan but no full time staffer for several years.

Can recommend resource and curriculum materials.

In-service training available through University of Maine.

MASSACHUSETTS
BOSTON
Judith Dortz
Massachusetts Department of Education
31 St. James Ave.
Boston, MA 02116
(617) 727-5518

With school district autonomy, state role is supportive.

Offers networking, conferences, and references.

NEW HAMPSHIRE
CONCORD
William Ewert
New Hampshire Department of Education
64 North Main St.
Concord, NH 03301
(603) 271-3293

Supports diverse approaches to EE by autonomous school districts.

Organizes and co-sponsors workshops.

Disseminates material and responds to teacher requests.

RHODE ISLAND
PROVIDENCE
H. Wells French
Rhode Island Department of Education
235 Promenade St.
Providence, RI 02908
(401) 277-3840

Conducted a state survey on EE in Rhode Island.

Offers information on several EE programs.

State EE Association also assists teachers.

RI in a Box still available: A trunk with activities and artifacts about RI history and built and natural environments.

VERMONT
MONTPELIER
George Tanner
Vermont Department of Education
120 State St.
Montpelier, VT 05602
(802) 828-3111

EE focuses on natural systems and outdoor education.

Offers energy education workshops, Project Learning Tree Workshops, and state EE guide.

Three teaching centers in state for energy and education.

AIA RESOURCE PEOPLE AND PROGRAMS:

CONNECTICUT
HARTFORD
C. James Lawler, AIA
10 North Main St.
West Hartford, CT 06107

AIA Public Education Committee

NEW HAVEN
Peter Borgemeister, Hon. AIA, Executive Director
Connecticut Society of Architects
85 Willow St.
New Haven, CT 06511

MAINE
HALLOWELL
Judith W. Harvie, Executive Director
Maine Chapter/AIA
1 Middle St.
Hallowell, ME 04347

MASSACHUSETTS
BOSTON
Lowell Erickson, Executive Director
Massachusetts State Association of Architects
320 Newbury St.
Boston, MA 02115

NEW HAMPSHIRE
CONCORD
Richard H. Clough, CAE, Executive Director
New Hampshire Chapter
43 S. State St.
Concord, NH 03301

RHODE ISLAND
PROVIDENCE
Kenneth J. Filarski, AIA
43 Page Street
Providence, RI 02903
(401) 861-2030

Rhode Island AIA Public Education Committee

Involved in developing catalyst activities and support services for increasing public awareness of and responsibilities to the total environment.

Offers AIA components support liaison with state Department of Education and Rhode Island Council on the Arts.

VERMONT
WAITSFIELD
Hanne N. Williams, Executive Secretary
New England Regional Council
RFD #1 Box 67
Waitsfield, VT 05673

LOCAL/REGIONAL RESOURCE CENTERS:

CONNECTICUT
AVON
Donald La Salle, Director
Talcott Mountain Science Center for Student Involvement, Inc.
Montevideo Rd.
Avon, CT 06001

A science and research education facility offering programs to students, teachers, and administrators all over the state. Programs cover kindergarten through graduate level in the areas of computer sciences, astronomy, meteorology, geology, ecology, chronobiology, and all the natural sciences, including alternate energy education.

Classes, tours, and workshops are available in all areas by arrangement only. Summer programs are also available for grades K-12.

Serves the state and some towns in Massachusetts and New York.

NEW BRITAIN
Alan Krauss, Director
New Britain Youth Museum
30 High St.
New Britain, CT 06051

Several youth programs including: 1st Gr., Outdoors—A Schoolyard Adventure; Gr. 3, Safari; A Museum Food Chain Study; and Gr. 5, A Trail Experience—Natureways.

Trail guides, Indoor/Outdoor Game Booklet, Teacher's Guide To Schoolyard Nature Activities.

Serves central Connecticut region.

NEW HAVEN
Larry Schaefer, Director
Environmental Education Center
Area Co-op Educational Services
800 Dixwell Ave.
New Haven, CT 06511

A resource center for schools in EE which provides services to teachers and administrators.

Teacher Training, Curriculum Development. Land Use Decision Making Kit, ECO-Kit, Earthwatch Vol. I, II, and III.

Serves central Connecticut—twenty-seven school districts.

MAINE
ORONO
Sherman Hasbrook, Director
University of Maine at Orono
11 Coburn Hall, UMO
Orono, ME 04469

Audiovisual materials on natural resource issues in Maine.

Serves the state of Maine.

WISCASSET
Tim Ellis, Executive Director
Chewonki Foundation
RFD #3 Box 3400
Wiscasset, ME 04578

Located at Camp Chewonki, the foundation offers several EE programs and services in addition to the summer camp activities.

A center for EE offers school programs, teacher workshops, and EE practicum. Also operates Maine Reach, an approved secondary school. Family and age-integrated programs in EE, volunteer programs, and farm and woodlot management program also offered.

Serves the state of Maine.

MASSACHUSETTS
CAMBRIDGE
Joyce Meschan, President
VISION, Inc.
Center for Environmental Design and Education
219 Concord Ave.
Cambridge, MA 02138

Provides consulting services and research in urban design, neighborhood conservation, EE, and historic interpretation.

Has developed *Street Smart*, a built environment education program. Chosen in 1981 as model program for *The Sourcebook*.

LINCOLN
Hatheway Environmental Education Institute
Massachusetts Audubon Society
Lincoln, MA 01773

Information and service center for educators.

Houses an extensive collection of teaching material and resources.

Offers consulting services, workshop training, newsletter.

Located opposite wildlife sanctuary.

Serves the state and New England region.

RHODE ISLAND
KINGSTON
David Abedon, Co-Director
Dr. Tom Husban, Co-Director
Project Environmental Quotient
Cooperative Ext. Specialist—4H
University of Rhode Island
Rodman Hall
Kingston, RI 02881

Assessing the quality of land use, air, water, and the size of population of your community.

Project Environmental Quotient Manual, state and community resources, resource specialists, leader training session.

Serves the state of Rhode Island.

VERMONT
BURLINGTON
Thomas Hudspeth, Assistant Director
University of Vermont
Environmental Program
153 S. Prospect
Burlington, VT 05401

Graduate and undergraduate courses in environmental studies, environmental interpretation, EE, environmental design, environmental psychology, aesthetic awareness, and historic preservation.

Also works with Burlington Urban Environment Program: an urban interpretive program based on results of a visual preference study.

COMMUNITY RESOURCE PEOPLE:

CONNECTICUT
STAMFORD
John C. Nerreau
Belltown School
21 Burdick St.
Stamford, CT 06905

Art Coordinator K–12

Actively involved in EE for almost thirty years. Has worked with architects in residence program and piloting a grade 3 EE program.

Has trained teachers in aesthetic education.

Can advise on projects and administration implementation.

MAINE
BATH
Kenneth Grant, Assistant Headmaster
Hyde School
Bath, ME 04530

Directs an EE program which serves as a laboratory in kindling new and different approaches to wilderness, environmental, and conservation education.

Can offer the benefits of his experience, limited resource file in EE and natural history, possible equipment rental.

MASSACHUSETTS
BARRE
William Gauld
Quabbin Regional High School
South St.
Barre, MA 01005

Teaches environmental studies in conservation which include emphasis on solar energy in design, cogeneration, underground housing, landscaping community planning, and land use.

Some curriculum written.

NEW HAMPSHIRE
CONCORD
Ron King
4 Bicentennial Square
Concord, NH 03301

Architect-in-Residence working with two teachers (4–6 grades) to develop workable curriculum augmenting classroom goals.

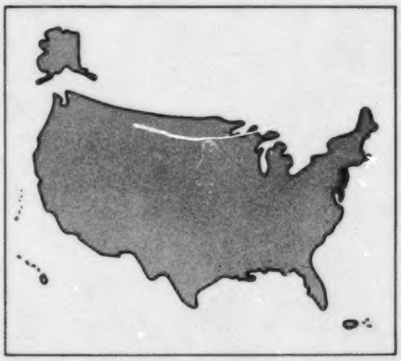
RHODE ISLAND
WARWICK
Gary Mazzie
Johnston High School
58 Acorn Lane
West Warwick, RI 02893

Ecology Teacher

Ecology program centers on use of nature trail (15 acres) which involves both natural and built environment.

Has a general secondary school resources/materials and complete ecology curriculum.

New Jersey



AIA REGIONAL CONTACT:

Paul Gallis, AIA
The Grad Partnership
Gateway One
Newark, NJ 07102
(201) 621-1700

AIA Public Education Committee

STATE EE COORDINATOR:

Bill Curzie
New Jersey Department of Education
P.O. Box 2019
222 West State St.
Trenton, NJ 08625
(609) 984-7300

Provides program dissemination services; distributes a monthly EE newsletter to teachers.

AIA RESOURCE PEOPLE AND PROGRAMS:

PRINCETON
Martin Beck, FAIA
30 Westcott Road
Princeton, NJ 08540

WOODBRIDGE
Helen T. Schneider, Hon. AIA,
Executive Director
New Jersey Society of Architects
1000 Rte. Nine
Woodbridge, NJ 07095

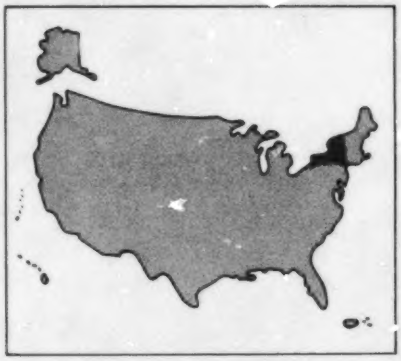
LOCAL/REGIONAL RESOURCE CENTERS:

BRANCHVILLE
Dr. John J. Kirk, Director
New Jersey School of Conservation
Montclair State College
Box 272
Branchville, NJ 07826

Residential EE field center which deals with four curriculum areas: humanities social studies, outdoor pursuits, and natural and physical sciences.

Serves over 11,000 teachers and students throughout NJ annually.

New York



AIA REGIONAL CONTACT:

Nathan Jerry Maltz, AIA
59 E. Third St.
New York, NY 10003
(712) 777-5131

AIA Public Education Committee

STATE EE COORDINATOR:

Barry Jamason
State Department of Education
Rm 314H
Albany, NY 12234
(518) 474-5890

AIA RESOURCE PEOPLE AND PROGRAMS:

ALBANY

Barbara J. Rodriguez, Executive Director
New York State Association of Architects
13 Northern Blvd.
Albany, NY 12210

RYE

Allan Anderson, AIA
22 Purchase Street
Rye, NY 10580

Runs workshops for educators and architects and organizes and teaches educational programs using architecture as a curriculum integrator.

Has lesson plans, slide shows, booklets, workshops, and book, *Architecture in Education*.

Serves Northeast region for consulting and teaches in metropolitan area.

LOCAL/REGIONAL RESOURCE CENTERS:

BRONX

Talbert B. Spence, Director of Education
Wave Hill Center for Environmental Studies
675 W. 252nd St.
Bronx, NY 10471

Program designed to expose 7-8 grade inner-city young people to the variety of natural science subject areas represented at the museum.

Provides non-formal EE training experiences and curricular outline developed for projects.

Serves New York City; students selected from Manhattan Community School Districts.

NEW YORK CITY

Robert J. Finkelstein
The Academy of Environmental Sciences
1700 Third Ave.
New York, NY 10028

Magnet junior high school with four-tiered curriculum, including environmental studies with experts in environmental sciences, environmental social sciences and environmental design.

Ismael Calderon
Education Department
American Museum of Natural History
Central Park West at 79th Street
New York, NY 10024

JHS Natural Science Coordinator

Nancy Wolf, Executive Director
Environmental Action Coalition
156 Fifth Ave., Suite 1130
New York, NY 10010

Publishes *Eco-News* and develops materials, e.g. energy curriculum.

Has built a model brownstone to demonstrate wise energy use and conservation.

Roberta Paine, Museum Educator
Junior Museum of the Metropolitan Museum of Art
Fifth Ave. at 82nd St.
New York, NY 10028

Maintains a junior museum library which includes references on architecture and architectural history for young people.

School programs (5-12 grades) on human society/culture of ancient, medieval, Renaissance periods as well as cultures of Asia.

NEW YORK CITY
Ernie Turner
New York Coalition (Project Lead)
151 Broadway
New York, NY 10036

Project LEAD (Leadership/Career Program for 12–16 year olds), sponsored by the NY City Youth Board Corporations, school districts, and the NY Urban Coalition. Provides leadership and career awareness training to youth leaders. An annual conference at an environmental center is a major feature, along with mini-internships and job development.

Has leadership manual, career guidance materials, career course outlines, and consultation to other cities and systems.

Currently works with eight school districts and 16 schools in New York area.

TROY
Jane Van Gelder, Program Coordinator
Built Environment Resource Center
Rensselaer County Council for the Arts
189 Second St.
Troy, NY 12180

Provides books and publications, exhibits and activity kits (a Cityscape Series), lesson guides, teaching materials, and slides.

Links architects with schools, runs workshops.

Cooperates with Rensselaer County Junior Museum and its Mobile Exhibits program.

Serves schools, community groups, and other interested organizations in the Rensselaer County area.

Beverly Clark, Director Mobile Exhibits for Museum (282 Fifth Ave., Troy, NY 12082)

WESTBURY
Mr. Norman Skliar, Administrator
Office of Outdoor and Environmental Education
BOCES of Nassau County, Salisbury Center
Valentines Road and the Plain Road
Westbury, NY 11590

Provides educational leadership in all aspects of outdoor education and EE to all school districts and provides suitable programs utilizing a variety of resources in the out-of-doors to achieve goals of education.

Numerous curriculum, media, and consultant services available. K through in-service education programs.

Serves Nassau (NY) County, with more than 56 local school districts, some Suffolk (NY) County school districts as well.

WHITE PLAINS
Dr. Ron Topping, Coordinator
Arts in General Education
White Plains Public Schools
Board of Education
Education House
5 Homeside Lane
White Plains, NY 10605

Program of artists-in-residence including architects, landscape architects, sculptors, graphic artists, dancers, actors, and musicians.

Program opportunities for K-12 in year-long projects that involve all different subject areas.

Chosen in 1982 as model program for *The Sourcebook*.

COMMUNITY RESOURCE PEOPLE:

NEW YORK CITY
Jeannette S. Cortez, AIA
116 Central Park South
New York, NY 10019

Interior design practice; offers parent-child workshop.

Mario Salvadori
2 Beekman Place
New York, NY 10022

Teaches students and teachers in architecture and structural engineering. Has written *Building: The Fight Against Gravity* and *Why Buildings Stand Up*.

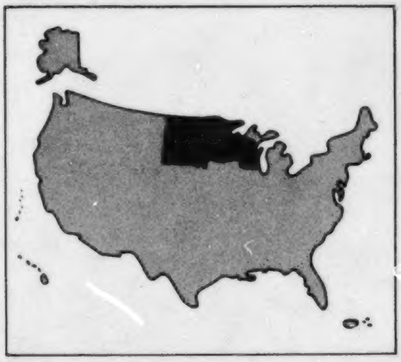
Offers full year course for grades 4–9 on architectural structures—principles and models. Has taught for several years in New York, New Jersey, Connecticut, and Massachusetts.

A teacher's manual will be available in fall of 1982, published by The New York Academy of Sciences. Three teachers working on program with ten more being trained.

YORKTOWN HEIGHTS
Dr. Frank Thompson, Director
ETI-ECOS
PO Box 309
Yorktown Heights, NY 10598

ETI-ECOS is one of the EE programs validated for distribution through the National Diffusion Network.

North Central States



AIA REGIONAL CONTACT:

James I. Lammers, AIA
Hills, Gilbertson Architects
6311 Wayzata Blvd.
Minneapolis, MN 55416
(612) 545-5678

AIA Public Education Committee

STATE EE COORDINATORS:

MINNESOTA
ST. PAUL
John Miller
Minnesota Department of Education
644 Capitol Square Bldg.
St. Paul, MN 55101
(612) 296-4069

Facilitates active EE efforts in state, Project Learning Tree coordinator, supports Minnesota Association of Environmental and Outdoor Education. Minnesota EE Board and the other allied organizations.

Provides variety of elementary and secondary EE and energy education curricula resources, workshop planning, sponsorship offering, and curriculum development assistance.

NORTH DAKOTA
BISMARCK
George Fors
North Dakota Department of Public Instruction
State Capitol
Bismarck, ND 58505
(701) 224-2275

Responds to requests for information.

A high school course is offered in ecology, focusing on environmental science.

SOUTH DAKOTA
PIERRE
Jim Hauck
South Dakota Department of Education and Cultural Affairs
Kneip Bldg.
Pierre, SD 57501
(605) 773-3655

Offers workshops in EE on request.

Energy education current focus.

WISCONSIN
MADISON
David Engleson
Wisconsin Department of Public Instruction
P.O. Box 7841
Madison, WI 53707
(608) 267-9266

Wisconsin Association for EE, Inc., a statewide organization promoting EE in state and the nation.

Has a newsletter and *Aesthetics and EE*; annual fall meeting; WISC sponsor for Project Learning Tree; conducts numerous workshops and seminars.

AIA RESOURCE PEOPLE AND PROGRAMS:

MINNESOTA
MINNEAPOLIS
Minnesota Society of Architects
314 Clifton Ave.
Minneapolis, MN 55403

Public Education in Architecture and Design program.

Has resource people and materials for establishing programs in architecture and design.

Small number of films and printed pieces; volunteer consultation.

Serves state of Minnesota.

NORTH DAKOTA
FARGO
Odin Dahl, AIA, Executive Secretary
North Dakota Chapter AIA
Box 1403
Fargo, ND 58107

Participates in Architects-in-Schools program and provides financial support.

In process of planning to publish EE materials.

SOUTH DAKOTA
SIOUX FALLS
Art Henrickson, Executive Director
South Dakota Society of Architects
2204 S. Holly Ave.
Sioux Falls, SD 57105

Supports Architects-in-Schools program in Sioux Falls.

WISCONSIN
MADISON
Eric Englund, Executive Director
Wisconsin Society of Architects
615 E. Washington Ave.
Madison, WI 53703

Supports Architects-in-Schools program.

LOCAL/REGIONAL RESOURCE CENTERS:

MINNESOTA
MILACA
Abby S. Marier, Director
Alternative Sources of Energy, Inc.
107 S. Central Ave.
Milaca, MN 56353

A nonprofit organization specializing in information dissemination regarding new developments in alternative energy and renewable resource technologies.

Available materials include *Alternative Sources of Energy* magazine, covers energy information and referral service, conferences, lectures, seminars, and courses.

SOUTH DAKOTA
BROOKINGS
Dr. Henry Gehrke, Professor of Chemistry
Department of Chemistry
South Dakota State University
Brookings, SD 57007

Teaches EE and energy education from a technical and societal point of view.

Serves South Dakota, southwestern Minnesota and northwestern Iowa.

WISCONSIN
MADISON
Robert Buchanan
Environmental Awareness Center
School of Natural Resources
College of Agricultural and
Life Sciences
University of Wisconsin
B-105 Steenbock
Madison, WI 53706

Has developed and evaluated new environmental design curriculum for 6–8 graders to examine natural and human systems patterns in their community regarding urban sprawl, to design workable options, consider controls, regional growth strategies, and planning ethics.

Wes Halverston
Water Resources Center
University of Wisconsin
1975 Willow Dr.
Madison, WI [illegible]3706

Has produced two curriculum guides in EE with holistic approach to total environment.

COMMUNITY RESOURCE PEOPLE:

MINNESOTA
MINNETONKA
Dale Karels, Project Director
Minnetonka Built Environment
Multidisciplinary Project
17000 Lake Street Extension
Minnetonka, MN 55343

A comprehensive approach to junior and senior high curriculum about the built environment developed on a Title IV grant. Twenty units and a semester course available on such topics as energy, transportation, and structures.

Chosen in 1981 as model program for *The Sourcebook*.

RED WING
Bev Anderson
R 2
Red Wing, MN 55066

Consultant with seven school districts for gifted children (K–12).

Has been involved in EE for several years and has worked with architects in the classroom and is familiar with resources in EE, especially regarding built environment.

WISCONSIN
MILWAUKEE
Allan Hida
Madison High School
8135 West Florist Ave.
Milwaukee, WI 53218

Science teacher (9–12)

Involved in an energy and environment program for the high schools in Milwaukee. Madison High has special courses also in environmental science, energy, cartography, marine science, atmospheric science, etc.

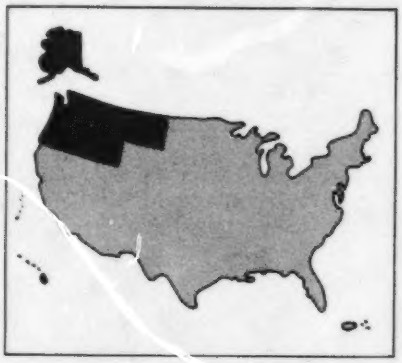
Descriptive brochure of program available.

WEST BEND
Mary Forston
1412 Sandra Lane
West Bend, WI 53095

Science and EE teacher for grade 6 with experience in setting up nature trails on schoolgrounds.

National Parks Service Naturalist and has experience in developing slide programs.

Northwest



AIA REGIONAL CONTACT:

Marjorie Wintermute, FAIA
2892 NW Upshur
Portland, OR 97210
(503) 221-1017
(503) 292-3777

AIA Public Education Committee

STATE EE COORDINATORS:

ALASKA
JUNEAU
Ray Cox
Alaska Department of Education
Pouch F
Juneau, AK 99811
(907) 465-2841

Unofficial coordinator, can provide references and referrals.

HAWAII
HONOLULU
Director, Environmental Education
Hawaii Department of Education
P.O. Box 2360
Honolulu, HI 96804
(808) 548-5914

EE legislation passed in 1974, elementary programs present total environment; secondary programs offer EE in both sciences and social sciences.

Offers workshops, materials, audiovisual materials, and references.

IDAHO
BOISE
Karen Underwood
Idaho Department of Education
Len B. Jordan Bldg.
650 W. State
Boise, ID 83720
(208) 384-2114

Responds to requests and makes referrals.

MONTANA
HELENA
Edward Eschler
Montana Office of Public Instruction
State Capitol Bldg.
Helena, MT 59601
(406) 449-2543

Provides workshops, supplemental material, instructional procedures, and curriculum consultation.

OREGON
SALEM
Raymond E. Theiss
Oregon Department of Education
Salem, OR 97310
(503) 378-4326

Provides workshops, training, conferences, materials and guidance.

Architects-in-Schools active throughout state.

WASHINGTON
OLYMPIA
David Kennedy
Washington Department of Education
Office of State Superintendent
Old Capitol Bldg.
Olympia, WA 98504
(206) 753-2574

Offers program development and dissemination of science and EE materials.

Has a full range of program materials and services for operation of science and EE programs.

AIA RESOURCE PEOPLE AND PROGRAMS:

ALASKA
ANCHORAGE
Edwin B. Crittenden, FAIA
431 West Seventh Ave.
Suite 100
Anchorage, AK 99501

AIA Public Education Committee

GUAM and MICRONESIA
GUAM
William Watson, AIA, President
Guam and Micronesia Chapter
Box 24392, GMF
GU 96921

HAWAII
HONOLULU
Frank S. Haines, FAIA
Architects Hawaii Ltd.
Suite 300
Pacific Trade Center
190 South King St.
Honolulu, HI 96813

AIA Public Education Committee

Beverly H. McKeague,
Executive Secretary
Hawaii Society of Architects
233 Merchant St. #200
Honolulu, HI 96813

IDAHO
BOISE
Jackie Fuller, Executive Secretary
Idaho Chapter
842 La Cassia Dr.
Boise, ID 83705

MONTANA
BILLINGS
Joann Harris, Executive Secretary
Montana Chapter
PO Box 20996
Billings, MT 59104

OREGON
SALEM
Hank Crawford, Executive Director
Oregon Council of Architects
350 Mission St.
PO Box 455
Salem, OR 97308

WASHINGTON
SEATTLE
Dorothy Johnston, Executive Director
Seattle Chapter
1911 First Ave.
Seattle, WA 98101

LOCAL/REGIONAL RESOURCE CENTERS:

IDAHO
POCATELLO
Henry J. Hulvey, Associate Professor
Idaho State University
Department of Architecture
Pocatello, ID 83201

Speaks at group meetings regarding the built environment and solar energy.

MONTANA
MISSOULA
Dr. Donald F. Darling
University of Montana
College of Education
Missoula, MT 59812

EE Coordinator

Provides basic information and material.

Teaches and facilitates teacher involvement in building or adapting to facilities.

Assists in the actual building of facilities—buildings (new and remodeled) and outdoor facilities.

OREGON
EUGENE
Dr. June King McFee, Head
Art Education Department
University of Oregon
Eugene, OR 97403

Within the Department of Art Education of the School of Architecture and Allied Arts, a master's and doctoral program is offered in Art Education; environmental design education major. Students take course work in art education, architecture, landscape architecture, social and behavioral sciences, and education.

Co-author of *Art, Culture and Environment: A Catalyst for Teaching.*

WASHINGTON
BELLINGHAM
John Miles, Associate Professor
Western Washington University
Huxley College
Bellingham, WA 98225

Provides teacher workshops, summer institutes and consultation in energy education, values education in EE, and approaches to EE through social studies.

Resources for values education in EE available.

Serves Washington state and British Columbia, Canada.

COMMUNITY RESOURCE PEOPLE:

ALASKA
ANCHORAGE
Larry Klawunder
Service High School
5677 Abbot Rd.
Anchorage, AK 99507

Science teacher grades 7–12. Incorporates energy education and EE into his teaching.

FAIRBANKS
Dr. Dolores Dinneen
Box 1250
Fairbanks, AK 99707

Has worked with Fairbanks AIA component in school programs.

HAWAII
HONOLULU
Lorraine Tokuyama
Mefferson Elementary School
324 Kapahulu Ave.
Honolulu, HI 96815

Teaches handicapped children and has worked in outdoor EE and conservation education.

IDAHO
BOISE
Coleen Little Armitage
2905 N. Fry
Boise, ID 83704

Teaches K–12, English, Social Studies, Science.

Developed a K–6 curriculum guide in energy and environmental conservation; as part of a pilot humanities unit (6th grade) she focused on "Resourceful Architecture," visiting contemporary homes in the area.

SHOSHONE
Begie Hatmaker
Box 344
Shoshone, ID 83352

5th Grade teacher

Directs an interdisciplinary curriculum that includes classroom activities, local environmental study area, and overnight camping trips.

Has a tape and slide program on environmental activities used for her various presentations.

MONTANA

BILLINGS

Deborah Richau
2011 Plaza Drive
Billings, MT 59102

EE teacher familiar with many programs and resources.

Has written *Introducing Students to Science Using the Environment—A Handbook for Teachers of Native American Students.*

GREAT FALLS

Cal Ryder
Great Falls Public Schools
1100 4th St. So., Box 2428
Great Falls, MT 59403

EE Coordinator

Has comprehensive EE program for grades 1–12; is familiar with literature and educational materials.

OREGON

EUGENE

Joe Garrison
Winston Churchill High School
1850 Bailey Hill Rd.
Eugene, OR 97401

Industrial Arts and Art teacher (10–12 grades)

Involved in EE for over 10 years.

Has "Solar Energy Research" and "Solar Energy: Alternative Energy" projects available developed by himself and his students.

Dana Mafit
ACTION High School
650 W. 12th Ave.
Eugene, OR 97402

Part of Southern Willamette Energy Action team which promotes energy education in the area service district.

Offers workshops concerning different programs, energy topics, materials, etc.

WASHINGTON

PORT ORCHARD

Larry Hill
East Port Orchard Elementary
1964 Hoover Avenue SE
Port Orchard, WA 98366

Works with EME program with elementary school students.

Ohio

AIA REGIONAL CONTACT:

Neal Layne, AIA
Executive Vice President
Architects Society of Ohio/AIA
37 W. Broad St., Suite 301
Columbus, OH 43215
(614) 221-6887

STATE EE COORDINATOR:

John Hug
EE Coordinator
Office of Education
Ohio Department of Education
65 South Front St. Rm 801
Columbus, OH 43215
(614) 466-5015

AIA RESOURCE PEOPLE AND PROGRAMS:

CLEVELAND
Florence H. Pistler
Executive Secretary
Cleveland Chapter/AIA
401 Euclid Ave.
210 The Arcade
Cleveland, OH 44114

DAYTON
A. Notley Alford
Lorenz and Williams, Inc.
120 W. Third St.
Dayton, OH 45402

Involved in Dayton Architects-in-Schools program run by area architects who visit elementary schools.

Locally developed program materials and books, aids, etc., from various sources are used.

Serves the Dayton area.

LOCAL/REGIONAL RESOURCE CENTERS:

CLEVELAND HEIGHTS
Joe Chadbourne, President
Institute for Environmental Education
2803 Scarborough Rd.
Cleveland Heights, OH 44106

Provides consultation services, referrals. workshops, library resources, and materials development.

Serves local and state agencies, school districts, teachers, and national EE organizations.

COMMUNITY RESOURCE PEOPLE:

MAUMEE
Roger Braker
340 Lacombe
Maumee, OH 43527

Familiar with EE resource materials and particularly with those relating to the built environment.

Pennsylvania

AIA REGIONAL CONTACT:

Hermine Mitchell
850 Andorra Rd.
Lafayette Hill, PA 19444
(215) 233-4151

AIA Public Education Committee

STATE EE COORDINATOR:

Robert Schwille
EE Coordinator
Pennsylvania Department of Education
Bureau of Curriculum Services
Box 911
Harrisburg, PA 17126
(717) 783-3958

First state to accredit EE specialists; eleven colleges provide EE training.

State EE text available.

AIA RESOURCE PEOPLE AND PROGRAMS:

HARRISBURG

Lela Shultz, Executive Director
Pennsylvania Society of Architects
PO Box N
212 Locust St.
Harrisburg, PA 17108

LAFAYETTE HILL

Hermine Mitchell, Hon. AIA
Architecture in the Schools
850 Ardmore Rd.
Lafayette Hill, PA 19444

"Architecture in the Schools" Foundation for Architecture is an enrichment program in the Philadelphia Public Schools for students to learn basic concepts about architecture and the built environment through teams of two teachers, one volunteer architect, one architectural student. K–8 grades; will expand to K–12 in next two years.

Resource center available at the AIA chapter offices in Philadelphia.

Minna Novick, Program coordinator.

PHILADELPHIA

Leslie Gallery, AIA, Executive Director
Philadelphia Chapter
117 South 17th St.
Philadelphia, PA 19103

LOCAL/REGIONAL RESOURCE CENTERS:

BLUE BELL

Mathew M. Hickey, Director
Project KARE
Montgomery County Intermediate Unit #23
Montgomery Ave. and Paper Mill Rd.
Erdenheim, PA 19118

A nationally validated EE program in the National Diffusion Network of the U.S. Department of Education.

Provides workshops, curricular materials, films, evaluation design, consultant services, and resources library.

National service area.

Chosen in 1981 as model program for *The Sourcebook*.

DINGMAN'S FERRY

John J. Paladino, Director
Pocono Environmental Education Center (PEEC)
Keystone Jr. College
RD #1 Box 268
Dingman's Ferry, PA 18238

A regional environmental study center on a 38-acre site adjoining 200,000 acres of public lands. Nature trails, biology field center, studios, work areas, recreational facilities and 52 cabins.

Cooperates with local state, regional, and national EE organizations to convene members for EE focused workshops.

Serves Northeast.

PHILADELPHIA

Dr. Aase Eriksen, Director
Built Environment Education Center
Educational Futures, Inc.
2118 Spruce St.
Philadelphia, PA 19103

Offers consultant services and maintains library.

Has several EE resource materials available.

Local and national constituency includes architects and teachers associated with the National Endowment for the Arts' Architects-in-Schools program.

PHILADELPHIA
Richard James, Director
Schuylkill Valley Nature Center
Hagy's Mill Rd.
Philadelphia, PA 19118

500-acre site with seven miles of trails, totally handicapped accessible, electronic trail also for handicapped, graduate programs, weekend programs, laboratories, library, and bookstore.

Teacher workshops (graduate credit), Teaching Resource Center, loan box program, Sunship Earth programming, conferences, programs for special populations, challenge course, and workshops in ACC, PLT, OBIS, and others.

Serves eight-county metropolitan area (PA, NJ).

QUAKERTOWN
John T. Hershey, Co-Director
Kirk Emerson Hershey, Co-Director
Environmental Group Research Institute, Inc.
Box 185, RD 3
Quakertown, PA 18951

Offers program planning, training and evaluation services.

Networks people, resources, and materials.

Conducts educational research in environment, energy and appropriate technology.

SANDY LAKE
Dr. Richard Touvell, Director
McKeaver Environmental Learning Center
Box 121, RD #3
Sandy Lake, PA 16145

Residential EE center.

Offers many EE programs throughout the year to teachers and students in the region.

SHIPPENSBURG
Dr. Lloyd Trinklein, Director EE
Shippensburg State College
Shippensburg, PA 17257

Teacher training.

EE teaching resources and references available through computer-assisted search program.

COMMUNITY RESOURCE PEOPLE:

ALLENTOWN
William E. Ayers
Allentown School District
31 So. Penn St.
Allentown, PA 18105

Science Curriculum Coordinator K-12; PLT facilitator, familiar with OBIS and many other EE programs and materials, experienced with EE curriculum development and EE field trip organization.

FORT WASHINGTON
Alan Moeser
Germantown Academy
P.O. Box 287
Fort Washington, PA 19034

Art teacher who has worked with his elementary school children in large geometry constructions, inner space capsules, and environmental art.

MEDIA
Dave Woods
Roosevelt School
464 So. Old Middletown Rd.
Media, PA 19063

Fifth grade teacher involved in district environmental science unit; trained in PLT and familiar with EE resources.

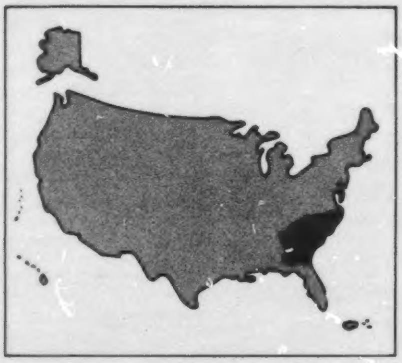
PHILADELPHIA
Sister Thomas Emmanuela
St. Philip Neri School
916 E. Moyamensing Ave.
Philadelphia, PA 19147

Fifth and sixth grade teacher involved in EE for several years.

Leila Finkelstein
Ellwood School
13th St. and Oak Lane
Philadelphia, PA 19126

Works with gifted elementary school children and has been involved with EE for several years.

South Atlantic States



AIA REGIONAL CONTACT:

Frank A. DePasquale, AIA
DePasquale Markham Thompson
Wilson
Architects and Planners, Ltd.
P.O. Box 3636
Durham, NC 27702
(919) 688-8102

AIA Public Education Committee

STATE EE COORDINATORS:

GEORGIA
ATLANTA
Dallas Stewart
Georgia Department of Education
207 Education Annex
156 Trinity Ave. SW
Atlanta, GA 30303
(404) 656-2576

NORTH CAROLINA
RALEIGH
Clinton Brown
North Carolina Department
of Public Instruction
RM 284, Education Bldg.
Raleigh, NC 27611
(919) 733-3694

Numerous publications for teachers and administrators; in-service workshops.

SOUTH CAROLINA
COLUMBIA
Alice Linder
South Carolina Department
of Education
803 Rutledge Bldg.
Columbia, SC 29201
(803) 758-2652

Very active support of EE throughout the state.

EE source book available, in-service training, etc.

AIA RESOURCE PEOPLE AND PROGRAMS:

GEORGIA
ATLANTA
Dorothy P. Spence, Executive Director
Georgia Association of Architects
Lobby Cain Tower
229 Peachtree St. NE
Atlanta, GA 30303

Architectural Book Center, speakers bureau, group tours.

NORTH CAROLINA
RALEIGH
Betty Silver, Hon. AIA,
Executive Director
North Carolina Chapter
115 W. Morgan St.
Raleigh, NC 27601

SOUTH CAROLINA
COLUMBIA
Doris L. Bullard, Executive Secretary
South Carolina Chapter
1522 Richland St.
Columbia, SC 29201

LOCAL/REGIONAL RESOURCE CENTERS:

GEORGIA
ATHENS
Robert Saveland
School of Environmental Design
University of Georgia
203 Dudley Hall
Athens, GA 30602

ATLANTA
Dale A. Durfee, AIA, Professor of Architecture
College of Architecture
Georgia Institute of Technology
Atlanta, GA 30332

RABUN GAP
Eliot Wigginton
Foxfire
Rabun Gap, GA 30568

Educational program building on cultural journalism made famous by the *Foxfire* series. Integrated numerous educational activities and projects with traditional subject areas at the local high school, linking cultural heritage to future environmental, social, and economic quality of life.

Based at local high school with a site that houses the Foxfire Fund and various program activities. In addition to the magazine, there is a newsletter for those involved in similar projects, called *Hands On*.

Chosen in 1982 as model program for *The Sourcebook*.

SAVANNAH
Charles E. Milmine, Director
Southern Energy Efficient Dwelling School (SEED)
Solar Home Office
2427 Easy Street
Savannah, GA 31406

SEED School is dedicated to the construction of affordable energy efficient dwellings with special emphasis on hot, humid climate. Hands-on construction projects, research, and consulting services.

Serves southern Georgia and South Carolina.

NORTH CAROLINA
DURHAM
Dr. William M. Sudduth,
Executive Director
North Carolina Museum of Life and Science
433 Murray Ave.
PO Box 15190
Durham, NC 27704

Conducts activities concerned with architectural techniques, walking tours, and exhibits.

Offers museum resources in science and technology.

COMMUNITY RESOURCE PEOPLE:

GEORGIA
WAYCROSS
Don Berryhill
Okefenokee CESA
Rt 5, PO Box 406
Waycross, GA 31501

Teacher education and resource center. Specialist in major curriculum areas, including science and EE with special facilities in the Okefenokee swamp.

EE activities, slide programs on request, instructional and guide service on local field trips.

Serves students of southeastern Georgia.

SOUTH CAROLINA
CLOVER
Pat Francis
Clover City Schools
Environmental Education Project
Clover, SC 29701

EE curriculum specialist K–12, particularly familiar with audiovisual resources and kits and games in EE.

Participates in Project Alive a IV-C state-validated project consisting of 54 teacher-developed activity books and an administrator's manual. Activities are designed to be infused into science, social studies, language arts, and math. Emphasizing ecosystems, energy, human impact, and natural resources for K–12.

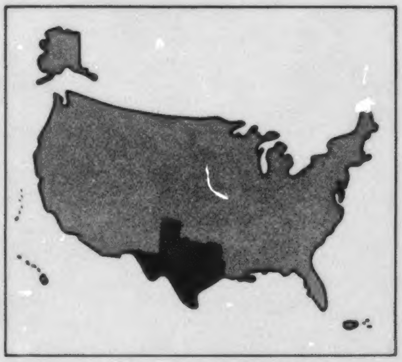
COLUMBIA
Jim Prater
Community Education
Hand Middle School
2600 Wheat St.
Columbia, SC 29205

Has worked with architects in residence and is experienced in practical hands-on design activities and construction projects.

Marlene Shade
Eau Claire High School
4800 Monticello Rd.
Columbia, SC 29203

High school teacher involved with Architects-in-Schools program, has developed her own teaching materials about the built environment.

Texas



AIA REGIONAL CONTACT:

W. Lawrence Garvin, AIA
Associate Dean and Chairman
Division of Architecture
Texas Tech University
Lubbock, TX 79409
(806) 742-3138

AIA Public Education Committee

STATE EE COORDINATOR:

Joseph Huckstein
EE Coordinator
Texas Education Agency
Division of Curriculum Improvement
201 East 11th St.
Austin, TX 78701
(512) 475-3653

Program and materials dissemination.

Recently developed K–12 energy curriculum modules.

High school environmental science course focuses on ecology and energy.

AIA RESOURCE PEOPLE AND PROGRAMS:

AUSTIN
Des Taylor, Executive Vice President
Texas Society of Architects
1400 Norwood Tower
Austin, TX 78701

DALLAS
James R. Pratt, FAIA
PO Box 19647
Dallas, TX 75219

AIA Public Education Committee

HOUSTON
Bruce Webb
4362 Fiesta Lane
Houston, TX 77004

AIA Public Education Committee

SAN ANTONIO
Richard R. Tangum
434 Oak Leaf Dr.
San Antonio, TX 78209

AIA Public Education Committee

LOCAL/REGIONAL RESOURCE CENTERS:

BEAUMONT
Janet Krulick, Curator of Education
Beaumont Art Museum
1111 Ninth St.
Beaumont, TX 77702

In conjunction with the Beaumont Heritage Society and local school system an eighth grade architecture and preservation awareness program is offered. *Beaumont, U.S.A., Our Built Environment* uses museum volunteers and volunteer architects to work in schools.

Chosen in 1981 as model program for *The Sourcebook*.

DALLAS
Carol S. Weber
Dallas County Heritage Society
Old City Park
1717 Gano
Dallas, TX 75215

Museum of Architectural and Cultural Heritage of North Central Texas, 1840–1910.

With 33 structures on 13 acres of land, Old City Park volunteers offer guided tours emphasizing pioneer life for 3–4 grades; urban growth and development for 5–6 grades; architectural and interior design for 7–12 grades.

A non-circulating library; guided tours of 19th century structures; special events and exhibits.

Serves Dallas, Dallas County, and north central Texas.

KILGORE
Michael Owens, EE Consultant
Region VII Education Service Center
P.O. Box 1622
Kilgore, TX 75662

Offers assistance in nature study areas and trails, activities to do outdoors, mathematics and science in the environment.

Materials and services available from National Diffusion Network.

Serves seventeen counties in eastern Texas.

COMMUNITY RESOURCE PEOPLE:

DALLAS

Joanne Pratt
APECS—Allied Professionals Educational Consulting Services
PO Box 19647
Dallas, TX 75219

APECS, a non-profit organization, is available to design and put on workshops tailored to the needs of the anticipated participants. Workshops often include activities described in their book *Environmental Encounter: Experiences in Decision-making for the Built and Natural Environment*.

Available to work nationally.

HOUSTON

Courtney C. Parks
2310 Berry Rd.
Houston, TX 77052

Elementary school principal who administers an EE program involving full-time teachers, working with teachers and all students.

MARSHALL

Wendell E. Jones
1003 N. Grove
Marshall, TX 75670

Directs an EE program on a five year plan where district schools plan and implement environmental projects every other year.

5–12 grades involved; 100-item environmental test has been designed to assess achievements in both cognitive and affective domains for 5–12.

WEIMAR

Jeff Carroll
P.O. Box 247
Weimar, TX 78962

EE activity and planning consultant.

Past coordinator of EE programs for U.S. Forest Service.

Specializes in teacher "in-service" methods training and the design of community action groups/school system cooperative programs.

Serves central and southern Texas.

Western Mountain States

AIA REGIONAL CONTACT:

Glenn Lloyd, AIA
511 E. Third St. So.
Salt Lake City, UT 84102
(801) 328-3245

AIA Public Education Committee

STATE EE COORDINATORS:

ARIZONA
PHOENIX
Tilman Turley
Arizona Department of Education
1535 West Jefferson
Phoenix, AZ 85007
(602) 255-4709

Offers support, referrals, and references in EE.

Arizona EE Handbook—K-12 guide dealing with total environment available.

COLORADO
DENVER
George Ek
Colorado Department of Education
State Office Bldg.
201 East Colfax
Denver, CO 80203
(303) 839-2419

Offers consultation and materials reference.

High school geography course available.

NEVADA
CARSON CITY
Jack O'Leary
Nevada Department of Education
Capitol Complex
400 West King St.
Carson City, NV 89710
(702) 885-5700

EE legislation adopted in 1971. Offers in-service training workshops, referrals, materials, references and consultation.

NEW MEXICO
SANTA FE
B. K. Graham
New Mexico Department of Education
State Education Bldg.
Santa Fe, NM 87503
(505) 827-5391

Offers workshops and responds to requests for materials.

EE mandated to be integrated into school curricula; present emphasis on outdoor education.

UTAH
SALT LAKE CITY
Richard Peterson
Utah Board of Education
250 East 5th So.
Salt Lake City, UT 84111
(801) 533-5061

Offers in-service training, primarily in natural sciences.

WYOMING
CHEYENNE
William Futrell
Wyoming Department of Education
221 Hathaway Bldg.
Cheyenne, WY 82002
(307) 777-7411

Provides in-service training and support regarding materials and guidance in EE.

AIA RESOURCE PEOPLE AND PROGRAMS:

ARIZONA
PHOENIX
Eleanor Smith, Executive Director
Arizona Society of Architects
1108 West Washington
Phoenix, AZ 85007

COLORADO
DENVER
Trudy McDermott, Executive Director
Colorado Society of Architects
1459 Pennsylvania
Carriage House
Denver, CO 80203

LOCAL/REGIONAL RESOURCE CENTERS:

COLORADO

BOULDER

J. Robin Hernbrode
National Audubon Society
4150 Darley Avenue, Suite 5
Boulder, CO 80303

Audubon Ecology Camps offer adult, university credit programs in natural history and ecology. Both one- and two-week sessions depending on location. Field classes explore all aspects of the ecosystem in addition to offering skills that aid the participant in viewing and appreciating the environment.

Four camps (Connecticut, Maine, Wisconsin, and Wyoming) accept participants from all of the US, Canada, and many foreign countries.

BRIGHTON

Carol Jones, Coordinator
Carol Leasure, Park Manager
Colorado Division of Wildlife
Barr Lake State Park
13401 Picadilly Rd.
Brighton, CO 80601

Funded by Division of Wildlife Non-Game Check Off. Provides education to schools, community groups, etc. in wildlife watching, bird watching, outdoor education, and general nature interpretation.

Visitors' center with education classroom, displays, A-V programs. Active volunteer training. Provides complete program for school groups in the field—includes instructors, curriculum developed for area, and equipment.

Serves Denver metropolitan area.

COLORADO SPRINGS

John Thompson, Colorado Coordinator
Energy and Man's Environment (EME)
2417 Warwick Lane
Colorado Springs, CO 80909

A nonprofit energy education organization that provides in-service training for educators and energy education materials.

Offers lessons, activities, glossary, bibliography (on energy education for teachers of K-12). Also developed conceptual framework on energy.

DENVER

Stephen L. Blomeke
Colorado Wildlife Federation
PO Box 18887
Denver, CO 80218

Conservation education/Wildlife Week.

Provides teacher education kits and conducts teacher workshops. Sponsors speakers' bureau to schools and other public groups.

Statewide.

Director
Plains Conservation Center
West Arapahoe Soil Conservation District
4932 So. Parker Rd.
Denver, CO 80802

1,920 acres of Colorado plains land close to metropolitan Denver set aside for EE education and recreation.

Tours through sod buildings, wagon rides for viewing animals and prairie on grounds.

William R. Turner
Denver Zoological Gardens
City Park
Denver, CO 80205

Summer Safari, a children's day camp offered by the zoo.

Since 1977, has offered several week-long programs of tours of selected areas of the zoo, animal contact, talks, and animal-related crafts and games.

Serves Denver metropolitan area.

ESTES PARK

Jean Menning, Coordinator
Seminar Program
Rocky Mountain Nature Association, Inc.
Rocky Mountain National Park
Estes Park, CO 80517

In cooperation with the National Park Service, Colorado State University, and the University of Northern Colorado, offers summer seminar programs at the park site. Week-long sessions are offered for college credit. Emphasis is on outdoor exploration of the Rocky Mountain environment: long and strenuous field activities are complemented by occasional indoor sessions. Each session limited to 20 adult participants.

NEW MEXICO

ALBUQUERQUE

Dr. Wolfgang F. E. Preiser, Co-Director
Dr. Anne Taylor, Co-Director
Institute for Environmental Education
School for Architecture and Planning
Albuquerque, NM 87131

Workshops and seminars on environmental programs and problems in built environment, particularly in Southwest, including impact of rapid development, energy, impact studies, environmental ethics, etc.

Has bibliographies, monographs, slide presentations, resource library.

Serves Southwest and Rocky Mountain States.

Chosen in 1982 as a model program for *The Sourcebook*.

COMMUNITY RESOURCE PEOPLE:

ARIZONA

PHOENIX

Tom Kreuser
Moon Mountain School
13425 North 19th Ave.
Phoenix, AZ 85029

6th Grade social studies teacher involved in EE for several years. Familiar with many state and national EE programs and materials.

COLORADO

LITTLETON

Helen Davis
5895 So. University
Arapahoe County District Six
Littleton, CO 80121

Coordinator of instruction for county, is familiar with state and national EE programs, has worked with South Suburban and the City of Littleton on local park project.

NEVADA

FALLON

Georgeen Huber
West End Elementary School
280 South Russell
Fallon, NV 89406

4th Grade teacher involved in EE for several years, has participated in EE training workshops.

NEW MEXICO

ALBUQUERQUE

John Cox
Albuquerque Public Schools
P.O. Box 25704
Albuquerque, NM 87125

Director of Environmental Education Center, provides short in-service workshops, K-12 instructional resource guide, university course for graduate credit.

Teacher specialists staff at EE center, mobile exhibits for energy education, community agencies and groups, provide classroom lectures and demonstrations, films.

Min Kantrowitz
Min Kantrowitz and Associates, Inc.
220 A Gold S.W.
Albuquerque, NM 87102

Consulting practice in environmental design research and education, Concentration in behavior/environment interactions and energy.

Offers consulting, workshops, and programs.

Located in Albuquerque, practice is nationwide.

Allen Templeton
West Mesa High School
Albuquerque, NM 87105

Life science teacher (10–12 grades) conducts EE workshops for teachers and agency personnel, familiar with local, state, and national EE resources.

LAS CRUCES

Luann Sisson
1727 Royal
Las Cruces, NM 88001

6th Grade science teacher runs EE summer camp for district (5th graders and 11th graders visit for one-week sessions), teachers trained in federal and other national EE programs (e.g. OBIS, Forest Service).

SANTA FE

Mary Louise Williams
Rte. 5 Box 229A
Sante Fe, NM 87501

Long-time environment activist, teacher.

Over past several years has developed a traveling EE dramatic presentation, STATE—Student Traveling Awareness Team for the Environment.

National Organizations

ALLIANCE FOR ENVIRONMENTAL EDUCATION

1619 Massachusetts Ave. NW
Washington, DC 20036

William Hammond, President

The Alliance was organized in 1973 to join non-governmental organizations together to pursue their common goal to encourage the development, implementation, and coordination of effective EE programs and to communicate and explore cooperative ventures with other entities in the field; a brochure is available describing the resources and services of the thirty member organizations and conference proceedings are available through the ERIC/SMEAC system.

AMERICAN SOCIETY OF CIVIL ENGINEERS

345 E. 47th St.
New York, NY 10017

Dr. George K. Wadlin

Five education committees working with staff support; concerned mainly with curriculum accreditation, interchange with industry, students, education research, engineering and technology, and all aspects of higher education; guidance brochures and audiovisual aids, accreditation visitors guidelines (5 areas), statistical surveys, coordination with all CE schools and administrators, and information source.

ASSOCIATION OF AMERICAN GEOGRAPHERS

1710 16th St. NW
Washington, DC 20009

Salvatore J. Natoli

Has a specialty group on environmental studies to support activities which facilitate communication among geographers interested in environmental issues, ranging from fundamental research and curriculum reform to aesthetics and ethics; to improve the quality of program efforts; to enhance the place of environmental studies within the discipline as well as the contributions of geographers to public and business policies on environmental problems; consultation and a number of publications available from the Commission on College Geography and from the Resource Paper Series of the AAG among which are *Man and Nature; Man and Environment; Perspectives on Environment; Land-Use Control; Interface of Law and Geography; Triumph or Triage; The World Food Problem in Geographical Perspective; Landscape in Literature; Visual Blight in America; Urbanization and Environmental Quality; Energy: The Ultimate Resource; Environmental Impact Statements; Water Resources for Our Cities.*

ASSOCIATION FOR EXPERIENTIAL EDUCATION

Box 4625
Denver, CO 80204

This international, nonprofit membership association works to establish a network of people sharing ideas and resources for achieving EE through experiential learning processes. The Association publishes a journal and other publications, holds an annual conference and regional conferences, and has developed a consultant network along with a resource and project network. A clearinghouse for positions in education and related fields is another feature of the Association's services.

CENTER FOR ENVIRONMENTAL EDUCATION

624 Ninth St., NW
Washington, DC 20001

Thomas Grooms, Executive Director

A private, nonprofit organization concerned with fostering environmental awareness; current focus is on marine ecosystems; three major projects underway—Whale Protection Fund, Seal Rescue Fund, and the Sea Turtle Rescue Fund. Publishes *The Whale Report* (quarterly), *The Seal Report, The Sea Turtle Report* (periodically), and *The Endangered Species Reauthorization Bulletin;* in addition, fact sheets, brochures, posters, coloring books, and educational materials are developed. The *Directory of Marine Education Resources* is available.

CONSERVATION EDUCATION ASSOCIATION

Office of Secretary-Treasurer
University of Wisconsin-Green Bay
Green Bay, WI 54302

Bob Darula, Secretary-Treasurer

An organization of representatives from school systems, conservation organizations, colleges and universities, business and industry, museums and nature centers and government agencies; founded to promote conservation/environmental education at all levels, encompassing all aspects of the natural and man-made world for a better understanding of the factors affecting the maintenance of a quality environment; offers conferences, publishes a newsletter and conference proceedings, instructional materials including slide tapes on outdoor classrooms, among other materials.

COUNCIL FOR ELEMENTARY SCIENCE INTERNATIONAL

1742 Connecticut Ave. NW
Washington, DC 20009

Ken Mechling

The council is an affiliate of the National Science Teachers' Association. CESI is dedicated to providing services and professional leadership in elementary school science, including EE. One publication, *CESI Sourcebook: Outdoor Areas as Learning Laboratories*, is devoted exclusively to EE. Other publications include additional sourcebooks, the *CESI Newsletter*, and reports in the journal, *Science and Children*.

ENVIRONMENTAL ACTION FOUNDATION

724 Dupont Circle Bldg.
Washington, DC 20036

Claudia Comins
Director

Two major projects on utilities and waste and toxic substances; both projects function as national clearinghouses on electric utility/energy issues and solid/hazardous waste and toxic substances issues; provides information referral, fact sheets on selected topics, experts listings; *Power Line*—monthly news journal on utility issues; *Exposure*—monthly news journal on waste and toxics issues.

The *Utility Action Guide* and *Waste and Toxic Substances Resource Guide* list useful resources available both from EAF and from other groups.

ENVIRONMENTAL DEFENSE FUND

475 Park Ave. So.
New York, NY 10016

Janet W. Brown

Performs scientific research and litigation on selected issues/cases in the above programs, with maintenance and promotion of environmental quality as prime motivation. Also uses economic analyses of different projects as important decision-making tools. Bi-monthly newsletter, the *EDF Letter* available, keeps members up to date on EDF activities; Annual Report also available. Additional offices in Washington, DC; Denver, CO; and Richmond, VA.

ERIC/SMEAC—Clearinghouse for Science, Mathematics and Environmental Education

Room 310
1200 Chambers Rd.
Columbus, OH 43212

John F. Disinger, Associate Director

Part of a national information system sponsored by the National Institute of Education, ERIC/SMEAC handles current information in the areas of science, math, and EE—collecting, evaluating, abstracting, and cataloging significant documents. Many are available through ERIC's Educational Document Reproduction Service, in microfiche and/or paper copy. SMEAC also produces, references, and sells materials (approximately 134 documents are currently available). A key feature is ERIC's computer search capability.

MARINE EDUCATION CENTER
MEMS (Marine Education and Materials System)

Virginia Institute of Marine Science
Gloucester Point, VA 23602

Susan C. Gammisch, Coordinator

A national network of 23 distributors

Collects, stores, retrieves, and disseminates marine education materials. Over 1,600 documents are stored in MEMS.

NATIONAL ART EDUCATION ASSOCIATION

1916 Association Dr.
Reston, VA 22091

John J. Malmann, Executive Director

A membership organization which publishes a journal, *Art Education*.

NATIONAL ASSOCIATION OF ENVIRONMENTAL EDUCATION

Box 400
Troy, OH 45373

Joan Heidelberg, Executive Vice President

A membership organization of college and university faculty and students, government employees, representatives from business and industry, labor, K-12 school teachers, curriculum coordinators and administrators, community leaders, journalists, environmental technicians and scientists, media producers, interpretive naturalists, librarians, and others interested in environmental education and the fostering of an environmentally literate society; convenes an annual conference; publishes a bimonthly newsletter and a report entitled *Current Issues*.

NATIONAL COUNCIL OF GEOGRAPHIC EDUCATION

Western Illinois University
Macomb, IL 61455

James W. Vining, Executive Director

Produced several publications dealing with urban environments; forthcoming book on *Our Vanishing Heritage: Studying Material Folk Culture*.

NATIONAL SCIENCE TEACHERS ASSOCIATION

1742 Connecticut Ave., NW
Washington, D.C. 20009

Bill G. Aldridge, Executive Director

The NSTA offers a professional link between science, education, and society. Established over 35 years ago, NSTA has over 40,000 members and subscribers. World's largest organization dedicated to the improvement of science education at all levels. Professional journals, special publications, annual conventions, employment resistry, local mini-grants for meetings, group insurance plans, and distinguished service awards and student programs. Publishes *Science and Children, The Science Teacher, Journal of College Science Teaching*, plus a variety of other publications and newsletters.

NATIONAL WILDLIFE FEDERATION

1412 16th St. NW
Washington, DC 20036

Curt Abdouch

Its Educational Division provides facilities and produces environmental education programs and materials for use by NWF members and the general public. Resources include National Wildlife Week activities, over 100 educational services publications, Conservation Directory, curriculum materials, The CLASS Project, conservation education centers, Backyard Wildlife Habitat program, Conservation Summits, Earth TREK, Ranger Rick Wildlife Camp, and Ranger Rick Nature Clubs.

POPULATION REFERENCE BUREAU

1337 Connecticut Ave. NW
Washington, DC 20036

Elaine M. Murphy

Conducts a population education program which prepares and distributes materials on population topics for classroom use; works with educational organizations to make information available through publications and workshops; publishes *Interchange*, the population education newsletter accompanied by teaching materials; conducts teacher training workshops, maintains population and environment film library; offers assistance in incorporating population topics into school curricula.

URBAN LAND INSTITUTE

1200 18th St. NW
Washington, DC 20036

Joseph Steller, Jr.

An independent, nonprofit educational and research organization, incorporated in 1936 to improve the quality and standards of land use and development; publishes books (*Management and Control of Growth Series, Community Builders Handbook Series, Water Resources Protection Technology, Streetscape Source Book*, and others) and periodicals (*Urban Land* and *Project Reference File*).

Name:

Affiliation:

Address:

Phone:

I recommend the following EE resources for addition to *The Sourcebook:* (title, author)

I recommend the following as a model program: (name and address of program)

Please list me as a resource person in your network with the following information:

Activity/Program Name:

Description:

Materials/Resources/Services Available:

Size and Location of Service Area:

Cut along dotted line, fold, tape, and mail.

Name:

Affiliation:

Address:

Phone:

I recommend the following EE resources for addition to *The Sourcebook:* (title, author)

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Alan R. Sandler
Public Education
The American Institute of Architects
1735 New York Avenue NW
Washington, DC 20006

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